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AMERICAN EDUCATION SERIES

GEORGE DRAYTON STRAYER, GENERAL EDITOR

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THE TREND IN AMERICAN EDUCATION

BY

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RUSSELL — TREND IN EDUCATION

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EDITOR'S INTRODUCTION

One of the most significant phenomena in the development of our American democracy during the past thirty years has been the ever enlarging scope of our system of education. There has been a conscious attempt on the part of our people to realize the democratic ideal of equality of opportunity. The remarkable progress that has been made is due in no small measure to the leadership of a group of men and women who have thought and planned in advance of current practice.

During the twenty-five years which are just past Dean Russell has been responsible for the development of an educational institution which has trained leaders for our American schools from the kindergarten to the university. He has been in the position of one who has thought and planned in terms of our rapidly developing school system. His leadership would not have been recognized had he sought merely to meet the current demand. The very great respect which members of the profession have come to have for his judgment, and their confidence in his foresight are clearly evidenced by the growth and influence of the institution over which he presides.

In this volume Dean Russell records his thought concerning many of the problems which have perplexed us during the past twenty years. The papers cover a wide range of topics, and are presented here with only slight

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revision and for the most part in chronological order. The reader will find, however, a unity among them determined by the author's thought with respect to the development of our American schools. One who is a member of the teaching profession will come from his perusal of the volume with a clearer understanding of the purpose of our public schools and with a renewed acceptance of the call to professional service.

GEORGE D. STRAYER

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CHAPTER I

THE TREND IN AMERICAN EDUCATION[1]

THE keynote of American life is democracy — social democracy. I say social democracy, because England is politically more democratic than the United States. On the other hand, England inherits conceptions of caste of which we know nothing. The English churchman prays to be content with that station in life in which Providence has placed him. On the other side of the water, schools for the poor are free; the rich must pay for their education. The great preparatory schools of England, as well as the venerable universities, are for gentlemen's sons, and only gentlemen are wanted in the church, at the bar, or in the army and navy.

Beginning of education in New England. — The founders of this republic thought it a self-evident truth that all men are created equal. The settlers of New England left the old world in search of religious freedom — to found a new home in which each might worship God in his own way. They were so intensely in earnest that they were willing to suffer for the faith, and so conscientious that they were willing also to make others suffer for differing with them.

They were stern men, those ancient fathers of New England, and they had little faith in the natural course

[1]A revised reprint from the EDUCATIONAL REVIEW, New York, June, 1906, used by courtesy of the publishers.

of human development. Five years after the establishment of the Massachusetts Bay Colony they founded the Boston Latin School — "younger" and more vigorous today than at any other time in its history. A letter written at the time says: "After God had carried us safely to New England, and we had builded our houses, provided necessaries for our livelihood, rear'd convenient places for God's worship, and settled the Civill Govt.: one of the next things we longed for, and looked after, was to advance learning and perpetuate it to posterity, dreading to leave an illiterate ministry to the churches, when our present ministers shall lie in the dust."

Next, in 1640, they founded Harvard College — also "younger" and more vigorous than at any other time in its career. Then, two years later (1642), they urged selectmen to see that parents provided for the education of all children to the extent of teaching them (1) to read, (2) to understand the principles of religion, (3) the capital laws of the colony, and (4) to engage in some suitable employment.

In 1647 the General Court of Massachusetts passed its epoch-making act providing for public instruction: "It being one chief object of that old deluder, Satan, to keep men from the knowledge of the Scriptures, as in former times by keeping them in an unknown tongue, so in these latter times by persuading from the use of tongues, . . . that learning may not be buried in the grave of our fathers in the Church and Commonwealth, the Lord assisting our endeavors, etc., etc. . . . It is therefore ordered" . . . that there be (1) one teacher for every fifty householders, to teach reading and writing, and (2) one

grammar school when a town reaches one hundred families "to instruct youth so far as they may be fitted for the university."

From such a beginning has come our great school system, potentially the mightiest engine for good in our national life, actually the most expensive single department in our civil government. It should be noted, however, that in those early days "reading and writing" were the means of training the common man; the substance of his education consisted of religion, civil government, and suitable employment — all of them factors of everyday life in the home, the church, and the community. Until 1692 only church members were freemen and allowed to vote. Down to the nineteenth century there were no public elementary schools, as we know them. The schools that did exist were designed to fit boys for college, and the colleges were but stepping-stones to leadership in state and church.

Development of leadership. — So it has been from the beginning of human society. Schools for leaders come first, because no society can long endure that does not have capable leaders — leaders in the field and leaders in the forum. The masses of the people may be trained — and trained successfully, too, — to maintain civil order and social stability by the institution of slavery, or bondage, or serfdom, or by social customs which impose class distinctions upon all. With leaders trained to lead and a people trained to obey, you have the prime factors in successful national life — successful, at any rate, from the autocratic or paternal standpoint. There is no call for universal education until in the course of human events

men — individual human beings — have rights which cannot be denied them. Schools for the common people arise when it is recognized, for example, that each person has a soul to save, or when the form of government gives to each a vote.

Era of industrialism. — The trend in American education for nearly two hundred years was advantageous to those who were to be our leaders. There was first the Latin school, preparatory to college, and then the collegiate course preparatory to the ministry and to law — *i. e.*, leadership in Church and State. Gradually American life began to demand trained physicians and engineers. Perhaps, in one sense, there had always been such a need, but consciousness of the need was not roused until the discovery of the manufacture and transmission of power through steam some hundred years ago. A new era was ushered in with the nineteenth century.

1. A government guaranteeing equal rights had been firmly established, and the old causes for contention were thus removed.

2. Freedom of worship was assured to all. Denominational control of education gave way to state control.

3. Increasing immigration began to make for a cosmopolitan population. Life was growing more complex; less dependence could be placed on domestic training.

4. Advances in science led to a new industrial order. Previous to the year 1800, men could use only such power as they had in their own bodies, in domesticated animals, or in moving air or running water. How impotent such means to the settling of the great West and the upbuilding of a great nation!

Differentiation in offerings. — These are some of the influences which converted us, within the limits of a single century, from a provincial and agricultural people into an industrial and commercial nation. The result was that the old education, however successful it may have been in producing great preachers and men of affairs, speedily became inadequate to meet the demands of an industrial and commercial age. A process of differentiation was soon noticeable within the college, and new professional schools sprang into being. Take, for example, the year 1850 as a turning point. Before 1850 we had, in all, some 10 law schools, 37 medical schools, 2 schools of dentistry, 3 engineering schools, 2 schools of agriculture and mechanical arts. We have since increased the number to 86 law schools (50 of these having been established between 1876 and 1900), 156 medical schools (86 established between 1876 and 1900), 56 schools of dentistry (47 established between 1876 and 1900), while engineering schools and schools of agriculture and mechanic arts are everywhere.[1]

And the end is not yet. We are rapidly building schools for nurses, for artists, for railway superintendents, for architects, for housekeepers and homemakers, for journalists, and even for philanthropists. Then, too, look at the differentiation within the old groups. Medical schools are to-day professional or graduate, medical or surgical, allopathic or homeopathic, or eclectic. Engineering has subdivided into civil, electrical, mechanical, chemical, sanitary, and so on through the list as given by many of our great technical schools.

[1] Present statistics show 142 law schools, 94 medical schools, and 50 schools of dentistry.

Progress of education. — There is, as I have said, no end to this development, and there can be no end to it, so long as human needs increase or differentiate or become more complex. The greater the need of trained leaders the more positive the tendency to supply them. When we cease to grow and expand territorially; when our wants become fewer or our ambitions and susceptibilities become less keen; when we stop pushing onward — then you may confidently predict a period of ease and comfort and satisfaction with existing educational opportunities. But so long as the United States holds its place among the great world powers, so long as our states and cities have ideals to which they have not attained, so long as individuals have ambitions which are not satisfied, so long will educational affairs remain unsettled and unsatisfying. The millennium which many school boards and some educators long for — that age in which the public will not ask for better schools and more of them, and when school superintendents and college presidents will cease to vex their teachers with requests to do some new thing — that millennium, I say, will mark the decline and fall of the great American Republic. It will be the end of a democratic fiasco in civil government, the bursting of the bubble which has tantalized European autocrats for a century with some semblance of reality, the end of the most stupendous failure the world has ever seen.

No, there can be no rest, no halt, even, in the progress of education. It is not something which can be stopped and started at will; it is not a tangible reality which can be fixed on a plate for microscopic examination at any time. It is a vital process, indissolubly bound up with our social

and civil life. Once you catch it, or check its course, you will find in your hands merely lifeless clay, a cadaver, in which the vital spark is extinguished.

Changes in course of study. — The trend in American education has been not only in the differentiation of professional schools, but also in the courses of study and subjects taught. I have no time to point out the changes that have taken place even within a generation in our American colleges and universities. Up to 1800 the entrance requirements to our best colleges were Latin, Greek, and sometimes a little arithmetic "as far as the rule of three"; and even in Latin and Greek scarcely as much as we now read in three years in a good high school. But between 1800 and 1870 eight new subjects were added to the entrance list, "whereas during the century and a half prior to 1800 the only addition of any consequence was elementary arithmetic."

I have no need to remind you that the modern college offers far more than any one boy can take or should take. Hence the struggle over classical studies *versus* scientific studies, the establishment of "modern" courses, the device of multiplying bachelor's degrees, the elective system, and all that train of controversies which have vexed the souls and spoiled the tempers of many, many college professors.

An indictment of present practices. — A survey of the field discloses much to be thankful for. We have made a fair beginning in our higher education — a beginning, I say, because there is not in this country to-day a college, or university, or professional school adequately equipped for the work it is attempting to do; there is not one of the

great plants, however much it may cost the public for maintenance, that is being conducted efficiently or effectively, simply because the public does not yet appreciate the worth of the work it is doing or realize that the greatest economy in operation is impossible when defective machines and ill-paid workmen are put to a task that demands the best in everything — the best of equipment, the best of men, and the best of service. Some day, I hope, the American public will realize that our school system, from kindergarten to university professional school, is an engine so expensive that we cannot afford to keep it idle a part of the time, or run it except with its maximum load; an engine so expensive, too, that we cannot afford to intrust it to the hands of inexperienced or half-trained engineers. No business man would for a moment tolerate the waste and inefficiency in his affairs that we all know exists in education to-day.

I wish to push the indictment one step farther. Our educational system is not only wasteful and inefficient because it is operated at "low pressure," but it is unfair in that it does not do what the founders of this republic meant that it should do. *It does not give equality of opportunity to all.* This may seem surprising, particularly as we have been boasting for a century of our American liberty, fraternity, and equality. It is the boast, too, of most Americans that our great public-school system — the greatest thing on earth — provides alike for every boy and girl taking advantage of it. This is half true — and dangerous, as all half-truths are. The fact is, the American system of education grants equality of opportunity only to those who can go on to the college and the uni-

versity. It takes little account of the boy — and less still of the girl — who cannot or does not wish for a higher education. Those who "drop out" at the age of twelve or fourteen, compelled to earn a livelihood, have missed their opportunity. But why? Do we in America have need only of professional men and "men of affairs?" Are those who pay the taxes and do the rougher work of life to be denied opportunity for self-improvement? Are only those who can afford to stay in school to reap the advantages of education? In a word, what are we doing to help the average man better to do his life work and better to realize the wealth of his inheritance as an American citizen? These questions raise the problem of vocational training for those who must begin early to earn their living. It is, in my judgment, the greatest problem of the future, and one which we may not longer disregard if we are to maintain our standing as a nation.

A start in life. — Although we have consciously done next to nothing to give the average man a fair start in his life work, unconsciously we have been putting forth efforts to meet his needs. A century ago the elementary school was the first step in the way to college. So it is to-day, but with this important difference: the curriculum of the old-time school was religion and the three R's. The time came when religion had to be put aside. That left the three R's — an impossible curriculum, notwithstanding the praises of some good people who do not think for themselves, but have an unquenchable desire to think for other people. You cannot read without reading something; and you cannot reckon without problems in something. The colonial schoolmaster, like the modern paro-

chial schoolmaster, made religion the substance of his instruction. The modern advocates of the simple curriculum of the three R's must choose between the "three R's" directed to something and nothing at all.

The fact is, the moment religion was put aside something else had to come in. We put in English literature, history, civics, science, and music — in a word, the course was enriched. Yet the common sense of our American public insisted on further enrichment for the sake of those who needed a more practical training. Hence the introduction of drawing, manual training, cooking, and sewing — fads and frills, if you please, but nevertheless an honest (if unintentional) effort to accord to the great mass of our children vocational advantages similar to those enjoyed by the few who could go on to higher grades of vocational training. It is precisely the same sort of development (from the simple to the more complex; from the general to the specific; from the purely disciplinary to the practical and vocational) that we have observed in the field of higher education.

But the end is not yet. The movement is only begun. The trend is unmistakably toward still further differentiation and still more complete adaptation to the needs of everyday life. The distinctive peculiarity of American education from the beginning almost to the present day is its *selective* character. Like the Scottish schoolmaster, we have rejoiced more over the one "lad of pairts" who somehow gets ahead, despite our instruction, perhaps, than over the ninety and nine who need our help. We boast of an educational ladder that reaches from the gutter to the university, and we see nothing amiss in making our

elementary schools preparatory to the high school, and the high school preparatory to the college and university. In other words, that which few need all must take.

Support of education in Europe. — My conviction is that, instead of being satisfied with our school system in this country, we should be thoroughly ashamed of it — ashamed not of our good schools and the good work that is being done, but ashamed that we as a people are being contented with so restricted a system of public education and so narrow a curriculum. We accept the politician's dictum that we are too poor to spend more than we do on education, when the fact is we are too poor to spend so little. More, much more than we now spend on education would be money in our pockets if only we knew how to spend it aright.

France, although heavily burdened for years, maintained in addition to her great system of elementary, secondary, and higher schools (including universities, professional schools, and schools of science) the following institutions for teaching the industrial arts:

1 National Institute of Arts and Trades.
1 Central School of Arts and Manufactures.
8 High Schools of Commerce.
1 Advanced School of Commerce.
1 Commercial Institute.
4 National Schools of Arts and Trades.
1 National School for Training Superintendents and Foremen.
2 National Schools of Watchmaking.
4 National Professional Schools.
26 Commercial and Industrial Schools for Boys.
6 Commercial and Industrial Schools for Girls.

In addition to the foregoing the municipal bodies of

towns of any importance have opened professional schools for the elementary teaching of trades, industries, or arts (design, weaving, lacemaking, dressmaking, dyeing, electricity, bookkeeping, and stenography). There were also numerous private schools and societies for the improvement of the artisan, which were well attended.

What France has done has also been done — and done better in some respects — by Belgium, Holland, Denmark, Sweden, Switzerland, and England.

American policies in education. — There are two sufficient reasons for our not following Europe's lead: (1) we don't want to, and (2) we don't need to. We don't need to because life in this country is still easy. It isn't half settled yet. Some day we shall have five hundred millions here. I suppose we have land enough, and land good enough if tilled properly, to support a population ten times as great as that we now have. But even fifty years from now, at our present rate of increase, we shall begin to appreciate what competition means. What will it mean when necessity compels us to use at its best every square foot of land we own? Then the man who will not work surely may not eat. And if he would preserve American traditions of decency and competence, he must work harder and more effectively than the man of to-day has to work.

It must be obvious to any fair-minded student of our educational system that we are doing next to nothing either to ward off threatened dangers or to prepare for those which are bound to come in future. Instead of doing the practical thing we, a so-called "practical" people, are content to produce "cuteness." The business world expects every man to do his duty — but it is very

obvious that his first duty is to hustle and to get results. I once heard a colored preacher in the South illustrate the spirit of the age in this wise: "Once we measured time by grandfather's clock, which said, 'Ever — forever, never — forever'; nowadays we use a Waterbury, which says, 'Git thar — git thar.'" Our aim is to "git thar" — in our college sports, in professional life, in business; everywhere we count on winning, honestly, if possible; dishonestly, if necessary, and if the chances of getting found out are not too great.

Contrary to the findings of some critics, I believe that our schools are partly responsible for confirming us in our besetting sins — not by what they teach, but in the prevailing methods of teaching. The fact is, we do look for results and are not overparticular how these results are obtained or whether they are just right or not. We are too easily satisfied with a plausible rendering of a foreign text; we are prone to measure proficiency by the amount of work done or the time spent in doing it, rather than by excellence of accomplishment or accuracy of method. We encourage guessing, and the prize too often goes to him who shows greatest skill in concealing his ignorance. In a word, we are too easily satisfied with appearances and attach too little weight to the moral effects of doing honest work.

There is another reason, as I have said, why we do not choose to follow European methods of education: We don't want to. We don't want to because we are not bound by social traditions. Our society is a social democracy. Our schools are designed to grant equal opportunity to all. In most other countries, England included, the school system is deliberately intended to keep some down

while helping others up. So long as our mode of government endures we cannot shut the door of opportunity in the face of any citizen. It is the greatest experiment the world has ever seen, and while there are many who would gladly see it fail, it is our bounden duty to make it succeed. It would be presumptuous to say, after only one century of trial, that success is already assured. This is only the beginning. We are just coming to realize some of our blessings, as we see more clearly for the first time some of our dangers.

Education for the coming generation. — How can a nation endure that deliberately seeks to rouse ambitions and aspirations in the oncoming generations which in the nature of events cannot possibly be fulfilled? If the chief object of government be to promote civil order and social stability, how can we justify our practice in schooling the masses in precisely the same manner as we do those who are to be our leaders? Is human nature so constituted that those who fail will readily acquiesce in the success of their rivals, especially if that success be the result of "cuteness," rather than honest effort? Is it any wonder that we are beset with labor troubles? We are, indeed, optimists if we see no cause for alarm in our present social conditions; and we are worse than fools if we content ourselves with a superficial treatment of the ills that afflict us. Legislation may do much to help us out of trouble, but it is only education of the right sort that can permanently keep us from ruin. There never has been a time when we were more in need of sound education, and in the struggle for existence that is yet to come we shall need a better education than we conceive of to-day.

An educational creed. — There is one educational principle that is peculiarly American. It is that every man, because he is a man and an American citizen, should be liberally educated so far as circumstances will permit. A man, according to our Magna Charta, is entitled to life, liberty, and the pursuit of happiness. The first business of the schools is to make life worth living, liberty worth striving for, and the pursuit of happiness something for which no man need be ashamed. We need, in my opinion, one more article in our educational creed. It is this: In making a man, make him good for something. It is a practice easily recognizable in the history of our universities and professional schools.

Our future procedure. — The next step is to see that the common man is equally well provided for. A beginning has been made in the enrichment of the course of study in our elementary and high schools, thus giving a choice of studies and better preparation for life if the pupil knows how to choose wisely; in the introduction of the natural sciences, manual training, and the domestic arts, thus giving some acquaintance with the industrial processes underlying our civilization if the subjects be well taught; and finally, in the differentiation of the school courses and school work whenever the future vocations of the pupils are definitely known, as in the negro schools of the South, the county agricultural schools of Wisconsin, and the trade schools of some of our eastern cities.

But all this is only a beginning. At best but little can be done before the age of fourteen, but that little can be of the right kind. In teaching arithmetic we can as well present problems of everyday significance as those which

are never met with out of school; in reading we can read that which is worth remembering; in history we can dwell upon some events which are not political; in science we can prepare for farming as well as for college; in manual training and the domestic arts we can do in the small what the race has done in the large in its efforts to provide food, clothing, and shelter, and to perfect means of communication and transportation. If nothing else is gained from the elementary school than a wholesome respect for man's industry, a good basis is afforded for participation in man's occupations.

The insurance of democracy. — The serious preparation for practical life begins for the great majority of persons at the age of thirteen or fourteen, on leaving the elementary school. The most dangerous period in the life of a boy or girl lies just ahead — say up to the age of nineteen or twenty. This is the time when the average boy must learn to be self-supporting, and when the girl must fit herself for domestic duties. It is the time, too, when technical training counts for most. I contend that every American boy and girl is entitled to practical help in this time of greatest need — and at public expense, too, if the state maintains high schools, universities, and professional schools for those who aspire to leadership in professional life. My reasons for this contention are these:

1. Anything that will contribute to the greater efficiency of the workman is a contribution not only to his own well-being but to the wealth of the nation.

2. Anything that will lead the workman to take more pride in his work tends to make him a better citizen and a more conservative member of society.

If it be possible to make each man, no matter what his social standing may be, an honest leader in his own field, a workman who is not ashamed of his handiwork, then we need fear no criticism of our colleagues across the sea, nor need we as an industrial people fear the competition in the world's markets. More than that, we need never lose faith in the righteousness of American ideals or dread the consequences of our social democracy. If there be those who say the task is impossible, I answer in the words of General Armstrong, when some one doubted the possibility of negro education, "What are Christians for but to do the impossible?"

CHAPTER II

THE TRAINING OF TEACHERS FOR SECONDARY SCHOOLS [1]

THE striking characteristic of American education is the fact that each school — better said, perhaps, each school board — is the measure of all things educational. And nowhere is this sophistic doctrine more apparent than in the secondary realm. What constitutes a secondary school, even the scope and purpose of secondary education itself, are debatable questions. This condition of affairs is largely due to the radically different tendencies in the development of our educational system. Part of it has come down from above in response to the intellectual and spiritual needs of colonial life; part of it has grown up from below to meet the demands of an ambitious people determined to win their way in the world. These two forces — one of them essentially aristocratic, the other essentially democratic — meet in the secondary school. The conflict that results naturally makes extra hazardous any attempt to apply general principles derived exclusively from experience either in elementary or in higher education. Dictatorial college faculties too frequently join hands with ignorant demagogues in promoting evil in place of good. The secondary school is not merely the first four grades of the college course, nor yet is it the last four classes of the elementary school; it is at once both of these and neither.

[1] A revised reprint from National Education Association Proceedings, 1901, used by courtesy of the publishers.

The training of the adolescent mind presents problems unknown in the primary school; with the psychological new birth another mode of education becomes imperative. And on the other hand it is obvious that the requirements for admission to college do not exhaust the demands of life. The college and university can never enjoy a monopoly of higher education. The peculiar function of the secondary school is the selection and training of leaders for intelligent service in academic, professional, and industrial life. In no educational work can there be greater need of teachers fully alive to the responsibilities resting upon them; nowhere can there be greater need of teachers fitted by nature and training to discharge their duties aright.

The college graduate as a secondary-school teacher.—It is only in these latter days that any question has arisen concerning the necessary qualifications of teachers for secondary schools. So long as the only secondary school of consequence was the academy or college preparatory school, so long the only teacher worth considering was the college graduate. He who would successfully fit boys for college must himself know by experience what the colleges demand. Moreover, in those days, what the colleges demanded was chiefly Latin and Greek, and it would have been idle for any man to have set himself up as a teacher of the classical languages who had not enjoyed the classical training. But with the growth of the curriculum, and especially since the rise of the high school has introduced variety not only in the subjects of instruction but in the purpose of secondary education as well, the former source of supply of teachers has proved inade-

quate. It may as well be acknowledged, first as last, that the college graduate of the last generation could claim no considerable superiority over his noncollegiate competitor in respect either to special knowledge or to skill in teaching many subjects of the secondary course. In fact, only in the classical languages has he stood unrivaled. In the modern languages, English, history, mathematics, and the natural sciences he has often found his equal. Frequently the knowledge of the specialist, or the professional skill of the normal-school graduate, has been preferred to the so-called "general culture" of the collegian who has sauntered through the mazes of an "elective course" with no suspicion of sound scholarship attaching to him. Unquestionably the lack of special knowledge and of educational interests in the average college graduate has had great weight in promoting the popular tendency to discredit a liberal education as an essential prerequisite to work in the secondary schools. We may deprecate the situation as we will, it is a fact, nevertheless, that the college-trained teacher has but slight advantage in gaining admission to the secondary school.

Teaching and its tangible reward. — One other fact worth consideration: It is becoming year by year more difficult for college graduates to find employment in the schools at a living wage. Granted that the number of positions annually falling vacant is relatively stationary, and that the number of applicants is relatively increasing, but one result can be expected. The law of supply and demand forces salaries down. And in the majority of secondary schools in this country to-day no pecuniary inducement is offered the intending teacher to take a college

course. On the contrary there is every reason — uncertain tenure of office, political favoritism, and the like — why the average teacher should invest the least possible amount of paying capital. Indeed, so lightly is the higher education regarded that it is a question whether the average teacher who must depend on the average salary can afford to spend the time and money necessary in acquiring the college degree. If this be true, or anywhere near the truth, then secondary education in America is in desperate straits.

A need for craftsmanship. — The educational welfare of the country obviously demands that public opinion recognize a higher standard of professional merit. Public opinion, however, is a shrewd judge of merit of any kind. With respect to teachers as in other matters, Lincoln's aphorism is true: "You can fool some of the people all of the time, and all of the people some of the time, but you cannot fool all of the people all of the time." The college graduate has been carefully weighed these many years past, and too frequently he has been found wanting. The specialist and the normal-school graduate have also been tested and the popular verdict is that they, too, are poor craftsmen. But with nothing better in sight and with no recognized standard of professional fitness, the school board and the wage they offer have come to be the controlling power. Moreover, it is evident, I think, that this condition of affairs cannot be materially changed so long as the chief factors in the problem remain the same. Our only hope lies in the introduction of a new factor more powerful than any now existing — the professionally trained teacher specially fitted for secondary work.

Training secondary-school specialists. — It may be argued that inasmuch as the cost of a college education even now tends to exclude the best material from the majority of schools, no further expense can reasonably be expected by way of special preparation. While I acknowledge the strength of the argument and fully realize that professional standards must ultimately conform to economic laws I must still insist that a distinctly good thing appeals powerfully to the common sense of the American people. And if the American people see that a thing is worth having they know how to pay for it without grumbling. The better class of secondary schools, the country over, pays fair salaries and insists on getting the ablest teachers. The very fact that competition for these positions is so disagreeably keen is the surest guarantee of a better system of training teachers for secondary schools. An annually increasing number of college graduates learn from experience that the best preparation they can make is none too good for the places they desire to fill. They cannot afford to compete, other things being equal, with those whose preparation has been less expensive than theirs; the only hope of the ambitious collegian is to put himself distinctly above his competitors in his chosen field. He must do as the business man does under analogous circumstances: increase his capital and make ready for a bigger business. This is the opportunity of the departments of pedagogy and of the teachers' colleges. It is precisely this condition of affairs which makes possible for the first time in America a serious consideration of ideal methods of training teachers for secondary schools.

Essentials for teachers. — But what is the ideal preparation for such teachers? First let me premise that the only method for us is to build on what we have, meet the demands of the times, while aiming at something better. Present conditions seem to me to indicate four qualities preëminently desired in the teacher: (1) general knowledge, (2) professional knowledge, (3) special knowledge, and (4) skill in teaching. The inability of the average teacher to present these four qualities in due proportion is the principal cause of the prevailing chaos in secondary education.

An intellectual perspective. — First, general knowledge. Four years ago the Sub-Committee of Fifteen reported that "The degree of scholarship required for secondary teachers is by common consent fixed at a collegiate education. No one — with rare exceptions — should be employed to teach in a high school who has not this fundamental preparation." Such a qualification seems reasonable enough. The liberal culture implied in four years of training in advance of the grades to be taught is surely not too much to require from every applicant for secondary teaching. The fact that the secondary teacher is to some degree a specialist, that he knows his subject and exercises considerable ingenuity in satisfying the requirements of college entrance or some examining board, is no indication that he has a world-view of sufficient breadth to justify him in attempting the training of youth or that he has an understanding of related studies sufficient to enable him to teach his own subject in a scientific manner. The inspiring influence that comes from well-developed manhood or womanhood taught to view the subject matter of

secondary education in a comparative manner, trained to see the relationships everywhere existing in the various spheres of knowledge — yes, the unity pervading all knowledge — is an influence that the secondary school can ill afford to neglect.

A knowledge of educational needs and problems. — Second, professional knowledge. It is equally important that the secondary teacher be able to view his own subject and the entire course of instruction in its relations to the child and to society, of which the child is a part. A teacher may be able to teach his subject never so well, may even have the reputation of being a distinguished educator, yet his life long be a teacher of Latin, or physics, or history, rather than a teacher of children. The true educator must know the nature of mind; he must understand the process of learning, the formation of ideals, the development of will, and the growth of character. The secondary teacher needs particularly to know the psychology of the adolescent period — that stormy period in which the individual first becomes self-conscious and struggles to express his own personality. But more than man as an individual the teacher needs to know the nature of man as a social being. No knowledge, I believe, is of more worth to the secondary teacher than the knowledge of what standards of culture have prevailed in the past or now exist among various peoples, their ideals of life, and their methods of training the young to assume the duties of life. Such study of the history of education is more than a study of scholastic institutions, of didactic precepts, or of the theories of educationists; it is *Kultur-Geschichte* with special reference to educational needs

and educational problems. It gives that unifying view of our professional work without which it is idle to talk of a science or a system of education; it prepares the way for the only philosophy of education which is worth teaching. Under professional knowledge I should also include such information as can be gained from a study of school economy, school hygiene, and the organization, supervision, and management of schools and school systems at home and abroad. Some of this technical knowledge is indispensable for all teachers; all that can be gained is not too much for those who will become leaders in the field. But the least professional knowledge that should be deemed acceptable is an appreciation of the physical conditions essential to success in school work and a thorough understanding of psychology and its applications in teaching, of the history of education from the cultural standpoint, and of the philosophic principles that determine all education.

Specialized training. — The strongest argument that can be urged against the average college graduate is that he has nothing to teach. The argument applies with even greater force to the normal-school graduate, however well he may be equipped on the professional side. Neither liberal culture nor technical skill can at all replace that solid substratum of genuine scholarship on which all true secondary education rests. A teacher with nothing to teach is an anomaly that needs no explanation. And I count that knowledge next to nothing which must be bolstered up by midnight study to hide its defects from a high-school class. No one who knows the scope, purpose, and methods of collegiate instruction, no one familiar

with the work of the normal school, will posit for a moment that such training necessarily gives any remarkable degree of special knowledge. I say this without any disrespect either to the college or the normal school; it is not the first and foremost duty of either of these institutions to turn out critical scholars or specialists in some small field. But special scholarship, I maintain, is an absolute necessity in the qualifications for secondary teaching. Without it the teacher becomes a slave to manuals and textbooks; his work degenerates into formal routine with no life, no spirit, no educative power, because he knows no better way; the victims of his ignorance rise up to call him anything but blessed, and take their revenge as citizens in ignoring altogether professional knowledge in the conduct of public-school affairs — because they, too, know no better way. Now as never before, do we need to emphasize the possession of special scholarship as an essential prerequisite to secondary teaching. It would seem that no argument were necessary to convince a Yankee that there is virtue in perfect tools, but somehow the idea is abroad that the perfect tool is the perfect textbook. Now is an opportune time to convince the American people that it is "the man behind the gun," rather than the gun itself, which counts.

A technic of teaching. — It is safe to say that no quality is more earnestly desired in the teacher, or more persistently sought for, than the technical ability to teach. The first question asked of an applicant is not "Has he had a liberal education?" or "What is his professional knowledge?" or "Has he anything to teach?" but this: "Can he teach?" The popular mind fails to recognize the

interdependence of these qualities, and failing in this it bases judgment of a teacher's ability on the relatively nonessential. Ability to maintain order in the classroom, to get work out of his pupils, to satisfy casual supervisors and examiners, to keep fine records and to mystify parents—this too frequently passes for ability to teach. How seldom, indeed, is a teacher tested by his ability to get something into his pupils, by his ability to impart his knowledge in a way that shall broaden their horizons, extend their interests, strengthen their characters, and rouse within them the desire to lead a pure, noble, unselfish life. School-keeping is not necessarily school-teaching. The technical ability to teach includes both. The art of teaching is mimicry, a dangerous gift, unless it be founded on the science of teaching which takes account of the end and means of education and the nature of the material to be taught. School-keeping may be practically the same for all classes of pupils, but true teaching must always vary with surrounding conditions and the ends to be attained. Graduates of colleges and normal schools alike must fail in technical skill if they teach as they have been taught. The work of the secondary school is unique. It requires an arrangement and presentation of the subject matter of instruction in a way unknown in elementary education and unheeded in most college teaching; it requires tact, judgment, and disciplinary powers peculiar to the management of youth. Herein is the need of that technical skill which is not, as has been well said, "a part of the natural equipment of every educated person."

Too poor to afford poor teaching. — The question before us is: How can these qualifications best be secured? There

may be, however, a preliminary question which some will desire to have answered: What is the relative importance of these qualifications, if all cannot be secured? In attempting an answer, I am well aware of the difficulties presented by actual conditions in various parts of the country, even by conditions which occasionally arise in almost any school, and more particularly by situations presented in the individual characteristics of teachers. There are schools in all parts of the country (one might almost say, all schools in some parts of the country) which think that they cannot afford good teachers. To such schools I can only say that they are too poor to be able to afford poor teachers. It is our business here to assert that the best teacher is always the cheapest; and if our influence has any weight, it should be used energetically wherever it is proposed to employ a poor teacher merely because the poor teacher will work on a lower salary.

Natural endowment of the teacher. — The personality of the teacher, however, is another matter. There are persons who might conceivably possess all of the qualifications which I have called essential, and yet be unfit to train animals, to say nothing of teaching children. In fact, these qualifications which I have enumerated are really conditioned by certain universal human attributes which are prerequisite to the truest success in any vocation in life. The person who does not first of all have high moral worth, intellectual honesty, fertility of imagination, industry, sympathy, tact, and common sense can never become a good teacher, and a notable deficiency in any of these attributes will assuredly prevent a person from becoming a great teacher, regardless of

professional training — the best that can be given. No one knows better than we do how absolutely essential is the right personality in the teacher. This knowledge, however, should not make us unappreciative of professional training. The rather should we see in professional training the means whereby native impulses are made available and directed systematically toward the highest ends of education. It can do no harm for us to exalt the native qualities in a teacher's equipment, but it can do no good to overestimate them. School officers too often exhibit a lack of intellectual honesty or common sense when they make professional qualifications of secondary importance in the selection of teachers. From that position it is only one step to personal and partisan favoritism; for no school principal or superintendent can make a strong case against political interference in school affairs, if he himself does not consider professional training an essential article in his educational creed. I yield to none in my appreciation of what is called "personality" in the teacher, but I maintain that the "personal" and the "professional" are coördinate, and that both are essential. To make the "personal" subordinate to the "professional" may be a sin; but to subordinate the "professional" to the "personal" is a crime.

Selecting a professional equipment. — What, then, of the four qualifications which I have enumerated as essential in the professional training of a secondary teacher? Is any one of greater relative importance than any other one? First, it may be said that a college course nowadays gives no assurance of general knowledge. There is considerable justice, I fear, in that claim. Our colleges are

all pretty thoroughly inoculated with the germs of the elective systems, and some of them have already developed into serious cases. In fact, it has become so epidemic that it seems useless longer to maintain a quarantine against the contagion. However, this movement may not be a plague except to those who do not know how to take advantage of it. It is true that never before has such wealth of opportunity been presented in higher education. The list of courses offered in our largest universities is certainly bewildering to one who is in doubt either of his own abilities or of his future needs. So long as I do not know myself, or what I shall become, how can I choose intelligently from the tender made by a modern university?

Individual responsibility. — And, from another standpoint, it may be asked: How can a college faculty intelligently prescribe a curriculum for an unknown person bound for an end that is also unknown? It is the complexity of modern life that affords the fullest justification of the elective system in higher education. But there is no justification for free election when a definite profession is in view, nor should there be any serious doubt of what subjects are of most worth in the training of a lawyer, a physician, or a teacher. And, in the case of the teacher, most subjects of the college course enter into his professional equipment. They are in part the means and instruments which he must later employ in professional service. Hence I do not hesitate to say that the collegiate education of the secondary teacher should be general in character and liberal in its nature and influence. Moreover, it is not the duty of the college or university to make courses of study suited to the needs of teaching or of any

particular profession; it is our business as teachers to know what is best for those who will come after us, and it is our duty as a profession to insist upon public recognition of our claims. In other words, it is absurd for us to criticize the college for not giving us what we want and in the way we want it; our part is to know what we want and to see to it that we get it.

Normal-school limitations. — There is an assumption in what I have said that a college course is an integral part of the professional training of a secondary teacher. After due allowance has been made for all the defects of collegiate education, it must still be acknowledged that there is no other institution which can more satisfactorily give the general knowledge so essential in a teacher's equipment. In my opinion, it is scarcely worth while to discuss this point. Nevertheless, the practice of some normal schools warrants the belief that a different conclusion is possible. I fail to see on what grounds such practice can be defended. A normal school that sets itself up to train teachers for secondary schools either greatly magnifies its office or deliberately stultifies the profession which it represents. Of course, I do not refer to those institutions which maintain academic courses equal in scope and quality to college courses, and which provide for four years of instruction in advance of the secondary school. A college degree is no criterion of excellence, nor is it necessary that the institution be known as a college. What is wanted is an education broad enough and liberal enough to qualify the teacher to select and train leaders for the coming generation. Such an education surely cannot be given by an institution that

limits its field to the needs of a single profession, whether that profession be dentistry, medicine, engineering, or elementary teaching. Not all of a college education comes from the classroom; an important part of it comes from the associations of persons with widely differing interests and ambitions. A professional school is narrowing in its influence. A normal school, therefore, if true to its own high calling, cannot be expected to afford a liberal education or to meet the requirements in general knowledge which the secondary teacher should have.

In the second place, no ordinary normal school can sufficiently equip the secondary teacher in special scholarship. And the secondary teacher who is not a specialist is an elementary teacher who has mistaken his calling. I am well aware that there are schools which expect teachers to teach anything and everything, but unless such schools can secure teachers who are masters of anything and everything, it is a misnomer to call them secondary schools. The age of pupils is no guide to the grade of a school. If it were, the evening schools where adults learn their A B C's would be called "evening universities." It will be a glorious day in American education when we have teachers thoroughly capable of teaching any subject in the secondary-school curriculum, but until we can be certain that such universal specialization is an assured fact, we would serve our profession better to insist on sound scholarship in one or two subjects. As things are now in most states, it is a disgrace to the teaching profession that we teachers make no efforts to distinguish between the competent and the incompetent. We even look complacently upon the efforts of politicians and law-

makers to fix the metes and bounds of our own profession. While it may not be proper for us to adopt trades-union methods, it is certainly most becoming in us to uphold the dignity of our profession by advocating at all times those standards which we know to be right — right not only for us as teachers, but right also for those whom we instruct. And I know I am right when I say that the secondary teacher should be master of every subject which he is called upon to teach. Moreover, I am convinced that the patrons of our secondary schools will believe us when we say it honestly; and when they are convinced, the means for securing such teachers will promptly be provided.

Finally, we have to consider the aim of the whole matter in what I have called the technical qualifications of the teacher. The public is coming to recognize, what some of us have long known, that trained teachers are superior to novices. That graduates of normal schools are in demand for secondary-school positions does credit to public opinion; that they should be encouraged to accept such positions without having made adequate collegiate preparation is not creditable to the normal schools. The fact is that both collegiate and normal training are essential. The problem is how to secure both.

Meeting the emergency. — I can see only two ways that are practicable. One way is to provide in the normal schools a distinct course to train college graduates for secondary schools; the alternative is to establish, in connection with universities, professional schools for teachers. Either plan is difficult of execution. College graduates do not assimilate readily with normal-school students; and even if special courses were provided, it would

require a change in policy and an elevation in standards which few normal schools could or should be expected to meet. On the other hand, it ought to be perfectly clear that a chair of pedagogy — even when it is called "education" or "the science and art of teaching" — is no adequate substitute for a professional school for teachers. Sixty years ago there were such professorships in law, but to-day we have law schools. How long must we wait for "schools of education"? The universities must provide not only courses in the history and philosophy of education, in psychology, and its applications in teaching, in school economy, and the like, but they must also provide for extensive and thoroughgoing practical work. A professional school for teachers is no more complete or adequate without schools of observation and practice than is a medical school complete and adequate without hospital and clinical laboratory.

So far as secondary-school work is concerned, therefore, either the normal school must raise its standards and prepare to enter a new field, or the universities must deal with teachers as honestly and liberally as they do with lawyers and physicians. Personally, I think the universities are the better fitted to take over this work, and it seems to me that they are making very satisfactory progress. But there is chance for great improvement, and this body should let it be known that it appreciates the gifts received, but never ceases praying for still greater blessings.

An insurance of professional advancement. — A survey of the field of secondary education discloses that these four essential qualifications of the secondary teacher are

everywhere recognized in practice. The difficulty is that few teachers unite them in due proportion. The thoroughly trained teacher, trained by study and tested by experience, has no difficulty in finding employment or holding his place once he finds it. Those who have positions to fill are eagerly scanning the professional horizon and are thankful for some refreshing sign, even though it is no larger than a man's hand. The function of the teachers' college and the university department of pedagogy is to establish a better code of professional signs and to insure more perfect realization of professional promise.

The task of teachers' colleges. — I am not of those who believe that legislation is the only remedy, or the best remedy, for existing evils — social or educational. In face of the prevailing economic conditions and with the present supply of secondary teachers, it is useless to urge the enactment of laws requiring a higher standard of academic or professional qualifications. Change the economic conditions, or improve the quality of professional preparation, and, I believe, legislation will follow as a matter of course or be found altogether unnecessary. Nor can the economic conditions affecting secondary teachers be materially changed until the public comes to recognize that we have laborers worthy of a better hire. In a word, the burden of improving the condition of the secondary teacher in America rests primarily upon the colleges and universities of America. And this is the task which the departments of education and the teachers' colleges must assume.

How is it being done? First of all it must be remarked that by far the larger number of colleges giving courses

in education seem to consider the work in its non-professional aspect. The science and art of education are regarded as subjects for research and investigation, or as means of liberal culture, akin to history and political science. Such work has its place, but unsupported, it plays no very important rôle in training teachers for secondary schools.

I find that the institutions giving professional courses in education for intending teachers in secondary schools are in general agreement as to what should be done, although few of them are able to realize their ideals. The diploma, or teacher's certificate, which is granted on the completion of a prescribed course, in the best colleges requires as a rule the bachelor's degree and a certain amount of work in the history and philosophy of education and in educational psychology and practice in teaching.

An educational code. — The best legislation which can be given us is that which will require secondary teachers to earn certificates in the subjects which they teach and which will prohibit their teaching subjects in which they are not certificated.

The lowest requirements which we can consistently make for such a diploma or certificate are as follows:

(1) The candidate must be a college graduate, at least when he receives the diploma, if not when entering upon the course, or have the equivalent of a college education.

(2) He must satisfactorily complete courses in (a) the history of education, (b) the philosophy of education, (c) psychology and its applications in teaching, and (d) school economy, especially school hygiene — an allotment, say, of eight hours a week throughout one year.

(3) As evidence of the special knowledge required in each subject in which a diploma is sought the candidate should be able to show the equivalent of at least three years' collegiate study of that subject — three to five hours a week. But whatever be the requirement in credit-hours, provision should be made for securing a sufficient degree of special scholarship as a prerequisite to what I consider the gateway to actual teaching, viz.: a course in the special methods of teaching each subject elected. Such a course may very properly be conducted wholly or in part by the university department which is responsible for the academic training in subject matter.

(4) The candidate must be given opportunity to observe good teaching, study its methods under guidance, and finally give instruction under normal conditions long enough to demonstrate his ability to teach.

This plan will enable a thoroughly good college student who chooses his electives wisely to secure a teacher's diploma in one or two subjects, *e. g.*, Latin and Greek, physics and chemistry, at the same time that he gets his bachelor's degree. For the college graduate it provides a one-year professional course which will enable him, granted that he has the requisite academic preparation, to secure a diploma in two or three related subjects.

A need for united effort. — I am happy to say that the scheme just outlined is no utopian dream; it is being realized wholly or in part in several of our universities. That it is entirely practicable I am able to affirm from my own experience in Columbia University. We have encountered many difficulties, to be sure, and I suspect my colleagues in other institutions have troubles of their own,

but I am confident that if the plan which I have outlined is one that should succeed, it can be worked out successfully in many places. It is a work, however, that demands our united efforts.

CHAPTER III

THE EDUCATIONAL VALUE OF EXAMINATIONS FOR ADMISSION TO COLLEGE

EXAMINATIONS are presumably means to an end, not an end in themselves. Their value will be determined by the service they render in the attainment of the desired ends. In school work the interested parties are the pupil who is entitled to make the most of himself, the teacher whose professional reputation is at stake, and the school or educational system which is supported directly or indirectly by the public for the public good.

There can be no doubt of the educational value of examinations to those who conduct the examinations. Our daily experience shows conclusively enough that success in life depends largely upon the critical acumen which precedes and influences judgment. Perhaps this is one reason (it is hardly becoming in me to make the suggestion) why colleges cling so tenaciously to the privilege of examining candidates for admission.

Ability to pass examinations an asset. — But seriously, it is good for a boy occasionally to have to pass formal examinations. He may some day want to be a civil servant — a policeman, a street sweeper, or a teacher (this is not intended to be an anticlimax) — and then he

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will be required to come to terms with a list of questions and an examining board. Moreover, he will have frequent use in life for the ability to conceal his own ignorance. And when we consider, in the words of Richard Baxter, "how very little it is that we know in comparison to that we are ignorant of," it will be seen that the ability to veneer this vast body of ignorance with a respectable coating of usable information is an accomplishment not lightly to be regarded. It might also be mentioned in this appreciation of the educational value of examinations (*for those who are examined*) that there is nothing more likely to take the conceit out of a fellow than a try at a paper set by persons whom he doesn't know in a subject which he thinks he does know. A modern philosopher has remarked: "A reasonable amount of fleas is good for a dog; they keep him f'm broodin' on bein' a dog."

Testing instructional efficiency. — The topic, as I understand it, excludes the consideration of examinations given in the course of instruction for the purpose of making that instruction more efficient. Such tests as written recitations, quizzes, term and final examinations, and the like are of the greatest value to the teacher who is really concerned in educating his pupils. These examinations are indispensable; they need no argument to justify the position they hold in our scheme of instruction. But examinations conducted by outside authorities are in another category. They, too, may have a place and be valuable, but the justification must come from some other source.

Valuation of extramural tests. — From the standpoint of the pupil, examinations conducted by persons

outside the school are far and away more harmful than helpful. I grant that they do tend to keep lazy boys up to the scratch, to show the conceited how little they know, to train the nervous and scatter-brained to hold themselves in and do something on time: in short, they do help a boy to pull himself together and concentrate himself on a task which requires all strength and ingenuity. But what is it all worth in comparison with the attendant evils? The tendency to substitute for high ideals in scholarship a mere caricature of learning, to put forward a mechanical process as the *summum bonum* of the school course, to replace clear thinking by guesswork, to regard the examiner as a person to be satisfied at any cost — honestly, if possible; dishonestly, if necessary. Any scheme that puts a premium on success at a particular time or under peculiar conditions, strains the moral fiber. It is certainly good for moral fiber to withstand a strain; but, when for the sake of reward or fear of failure the strain becomes unendurable, the result is altogether bad.

The recent experience of an eastern preparatory school is by no means exceptional, save in the extent of the fault and the publicity given to it. The relation between candidate and examiner does not promote high moral standards, witness the need of proctors and the unwillingness of boys, even college students, to assume the moral responsibility of taking examinations without watchers. The overseers of a New England college have recently published the following criticism of prevailing student customs:

It is well understood that the student body in most colleges has always sanctioned a highly artificial code of morals which

thoughtful men would repudiate at once in the domain of business or of society. This peculiar code, which tolerates cheating in examinations, justifies the destruction of private property in the celebration of athletic victories, encourages boorish manners and various forms of reprehensible conduct and causes strained relations between professors and students, was perhaps a natural outgrowth of the inflexible curriculum and the paternal form of college government which prevailed until comparatively recent years.

The situation is a relic of that educational barbarism which assumed no honesty in the scholar, and no sympathy in the master.

On this point, therefore, let there be no misunderstanding. To the boy who is examined by outside authorities *for the sake of personal gain*, there can be no benefit worth mentioning which cannot be secured equally well in some less reprehensible way; but, on the contrary, the process tends to lower our intellectual and moral standards, a fact which, through long familiarity, we have come to minimize or to disregard entirely.

The need for outside examinations. — But, as I have said, there is a place for examinations, and in that place they have a distinct value. *Outside examinations are imperative whenever the secondary schools are unable or unwilling to assume the responsibility of meeting the requirements for admission to colleges and universities.* If good work is to be done in our colleges and professional schools, a suitable foundation must be laid in the field of secondary education. If the secondary schools will not, or cannot, assure the strength of that foundation, then it is imperative that the higher institutions impose their own tests. Weak schools, of course, may be left out

of consideration. But why, it may be asked, should any secondary school refuse to certify to the strength of its candidates, if it is capable of doing so? Several reasons at once suggest themselves: lack of knowledge of what the higher education really demands, modesty in proclaiming one's own belief, unwillingness to be tacitly responsible for work over which one has no control, inability to withstand the importunity of ambitious parents, adherence to collegiate customs, and so on through a long catalogue. We have all heard them many times, and in many forms, varying from the modest excuse to the utterly imbecile apology.

Shifting responsibilities. — So trivial do some of the reasons seem, and so out of harmony with the character of the men who put them forth, that I have concluded to look deeper for the true cause of the apparent unwillingness of certain secondary-school masters to stand sponsor for their scholars. When the principal of a large high school tells me that he has more important work to do than to satisfy the crotchets of some college professor, I can see an obvious reason for his position, but when the master of a school avowedly preparatory to college, and well assured of its patronage, tells me that he prefers outside judgment as to which of his pupils shall go to college, I am at a loss to understand his meaning without appeal to first principles.

English educational ideals. — The great public schools of England — Eton, Harrow, Rugby, and the rest — have long been ideal fitting schools. Their ideal is, I need hardly say, out-and-out English; it is not French; it is not German; it is not American, but it is a type which finds sympathy and support everywhere.

An Englishman, high in the councils of the government, has said:

"We have never made an idol of intellectual instruction imparted in day schools. In other words, our great educators have upheld the belief (though we are far from having lived up to all that the belief implies) that a school ought to be something higher than a knowledge factory; that what a man *is* matters a great deal more than what he *knows:* That wise actions involve many vital elements besides intellectual attainments; and that education, in the true sense of the word, is an atmosphere and a discipline affecting heart and mind and body, and neglecting none of the three."[1]

Again he says:

"We are in the habit of liking our national life to be so arranged as to allow as much freedom as possible for every gifted individual to express himself according to his inborn faculty. This means that we prefer untidy freedom to an immaculately neat system of restraints. We resent the idea of pressing boys or girls to learn a great deal at school. We believe in the value of a good deal of well-employed idleness during early years."[2]

In other words, the master has much more to do in school than to give instruction, and for the boy there is a larger and more important life than the life of the classroom. Kipling portrays that life most admirably in *The Brushwood Boy* in his description of Georgie Cottar's school life. We find the boy at first taking part in athletics; growing strong because of the outdoor exercise, and at the same time winning confidence in himself from his contact with his fellows. Later, he became head of the school and head of the house where he lived. It was then his duty to keep order among seventy boys, and to preserve the "tone" of the school. To Georgie, school was the place where

[1] Dr. Sadler, *Special Reports*, Vol. IX, p. 9. [2] *Ibid*, p. 501.

important things happened and where real situations arose which had to be met wisely; to him the school world was the real world. And the principal of the school, the Head, was always back of him, guiding him by suggestion rather than by direct advice; bringing him to realize that boys and men are very similar, and that the ability to manage the one, will, when developed, become the ability to direct the other.

During the last six months in school he was made familiar with the types of answers most pleasing to his examiners, so that he might be passed on to another school which would more directly fit him for taking up a work in the world. But the important thing was that all the while, his character was gradually being formed by contact with the other boys and by the influence of his masters. "He did not know that he bore with him from school and college a character worth much fine gold, but was pleased to find his mess so kindly."

This little sketch of Kipling's is, I believe, the best portrait of the English public school in existence. He puts duty, common sense, character, in the foregound, as the great ends to be desired in education.

The master as a righteous judge. — Such an ideal of education as this demands, indeed, exceptional men as teachers. They are men who cannot be harnessed to a system or hampered by restraints. The master is the school, and because masters differ, the schools will not conform to an accepted norm. A few succeed; others overreach themselves and are lamentable failures. Under such a system intellectual attainment ranks as one aim among many, and it is conceivable that it may not always be the most

important one. Strength of character, honesty, integrity, physical prowess, the ability to lead one's fellows, cannot be relegated to second rank in any system of education. Moreover, the intimacy between master and scholar in a good home school — an intimacy which, in the course of years, ripens into an affection that is akin to parental love — make it extremely difficult for the teacher to judge the boy from one standpoint only. He knows him too well; his faults and his virtues are spread before him in an open book. To single out one attainment on which to predict the future is to neglect others which will surely tell as time goes on. How can the master, under such conditions, be a righteous judge? So it happens that in such a system of education, examinations conducted by higher authorities come easily and naturally to be the culmination of the school course.

Limitations of boarding schools. — Say what we will about the English school system, we Americans do believe in the best ideals of English education. There is something in "Tom Brown's School Days" which thrills us as schoolmasters even more than when we were schoolboys. We are ready to say, and we generally mean it, that what a man *is* is of far more consequence than what he *knows*. We believe that the making of man is the chief end of school work, and we are not unwilling to borrow methods from those who seem to be successful in making a certain type of Englishman.

But notwithstanding our admiration for some things in English education, we cannot accept all that the system implies: class distinctions; "boarding schools for those who are to be leaders in Church and State, day schools of

an inferior sort for the masses;" separation of the sexes whenever possible; interference of a state church; low ideals of scholarship. Some of those we regard not so much a fault of English education as of English life, but bad teaching is certainly the work of poor teachers.

A comparison of types. — It has been remarked that in judging a teacher, the German asks, "What does he know?" the American, "What can he do?" the Englishman, "Is he a good fellow?" Dr. Sadler, whose office in England corresponds to that of the commissioner of education in this country, says on this point:

> No schoolmasters in the world lavish more time and thought and strength on the care of their pupils than the English secondary schoolmasters. On what may be called the pastoral side of their office, they are beyond rivalry. . . . But because the English secondary schoolmaster so often lives among his pupils from morning to night, he has far less time and strength to spare for professional studies than has his continental counterpart. He is much more the friend of his pupils, and much fresher in his sympathies with the interests of young people. But he is far less of a student; as a rule, is much less learned; and is often a hardened amateur in his methods of teaching. . . . Clumsy, antiquated methods of instruction are far too common in our secondary schools.[1]

It is for an intellectual tradition, as persistent and congenial as the ethical tradition which characterizes the best English education, that Dr. Sadler pleads:

> The development of individual intelligence is largely a question of methods of teaching, but also of choice of studies. Educational efficiency of the best kind depends on having small classes; highly trained teachers; skillful methods of teaching; not too many sub-

[1] Dr. Sadler, *Special Reports*, Vol. IX, pp. 10, 11.

jects; the right order of subjects; the right choice of subjects; and the avoidance of hurry, of excessive competition, and of intellectual overstrain. . . . The keen study of methods by teachers is one of the best signs of educational progress. But the aim should be, not to enable the pupil to win a prize or a scholarship by a certain time, or to pass in some competitive examination (though I am far from meaning to imply that all competition is bad or that all examinations could be dispensed with) but to start him in the right way of learning things for himself, to arouse his interest in important subjects, and to give him a sure foundation of accurate and well-directed knowledge Large numbers of our secondary schools are worried by a superfluity of examinations. It would be far better to have some well-defined intellectual aim for each school, and to allow the teachers to work steadily and quietly toward that aim.[1]

I have quoted thus at length from a high English authority to show how conscious some Englishmen are of the great defects in English education. His verdict is, in a word, (1) low ideals of scholarship and (2) bad teaching. Both lead naturally and inevitably to the curse of examinations systematized and conducted by authority of the state or university.

The American ideal. — We Americans are, as Mr. Kipling puts it, "mixed peoples with all the vices of men and boys combined." But along with the vices go virtues, which our schoolmasters steadily keep to the front. We believe in the doctrine of equal opportunity for all men, and for every boy and girl who can use it we believe in an educational ladder reaching from the kindergarten to the university. That ideal at least is not English. We believe in helping each pupil to make the most of his opportunities and to become that which he wishes to be,

[1] Dr. Sadler, *Special Reports*, Vol. IX, pp. 163, 164.

providing his aim is not too obviously harmful to his fellows. We set up no barriers, social or otherwise, to hamper his progress, and we never regard his career as ended until he is safely under ground. There is no "culmination" in American life short of death itself. Our school system, therefore, if it is to fit for American life, can have no bounds. We have no right to speak of the "culmination" of a school course, unless we mean thereby, in college parlance, a "commencement." And least of all should we think of examinations as the culmination of anything educational.

Development of an educational organic unity. — Let us reason together about this thing — this relic of educational barbarism. It comes to us with the English stamp not yet effaced; it bespeaks a tradition of poor scholarship and bad teaching. It is enforced by institutions which are complacent enough to suppose that scholarships can be erected on a secondary education, the sole guarantee of which is an examination for college entrance, or in lieu thereof, as was once remarked in a meeting of this association, "the good looks of the candidate." Is it not more reasonable to suppose that when we succeed in evolving an American system of education — really American, I mean, not a mere cross or hybrid — it will be a unity, a system necessarily made up of constituent parts, but so nicely adjusted that part will work with part in organic unison? When that time comes I venture to predict we shall hear nothing of examination for admission to any grade or to any school, but much will be said of examinations for instruction and promotion. The elementary school will pass on its pupils into the secondary

school, and the secondary school will admit them to college, if that be their proper aim. Or, more properly speaking, scholars who are let out of one grade or school will admit themselves to the grade or school next higher. Already we hear it said that graduates of any good four-year high-school course should find a college course open to them. I accept the statement, and should be glad to add to it these words — "without examination by college authorities."

A necessary evil. — But before these words can be added, the American public must see to it that the high-school course is really good, and that the teachers, in point of character, scholarship, and professional ability, are really worthy of the positions they occupy, and of the hire which they ought to have. In the meantime, it is our duty to be righteously discontented with our present schemes of state inspection, regents' examinations, college entrance boards, and the like, knowing them all to be dispensations of Providence, calculated to keep us humble, and fit us for a more blessed state. The millennium is not yet in sight, but the advance made in recent years in the matter of uniform entrance requirements, and especially in the establishment of the College Entrance Examination Board, is most gratifying. While we are waiting, let us be honest enough to confess that all these examination schemes are devices, as some say, to impress upon a doubting world the great importance of certain indispensable institutions of higher learning, or the acknowledgment, as others declare, of the shortcomings of American secondary schoolmasters.

A problem for solution. — To sum up: Examinations

must have a place in every scheme of instruction. Instruction can proceed only when the extent and quality of the learner's knowledge is definitely understood. Every recitation, every review, is such an examination; further examinations of a formal sort are often desirable for the sake both of the teacher and of the pupil. But such examinations are given by teachers within the school or school system and primarily for the purpose of instruction. Examinations by those outside the school, especially when given for the purpose of determining a pupil's ability to undertake an entirely new course of instruction, have no educational value *for the pupil* which cannot be secured equally well in some less reprehensible way. Such examinations, however, are practically necessary when intellectual attainment is not the only aim of school instruction, and both necessary and inevitable when that instruction is inefficient. Outside examinations are imperative whenever the secondary schools are unable or unwilling to assume the responsibility of meeting the requirements for admission to colleges and universities. Until a norm of secondary instruction is established and generally recognized, college entrance examinations cannot be dispensed with. The sole object of this paper is to show that such examinations have no especial educational value for those who are examined; they do have a distinct value in our school system and must be retained until some better plan is found for keeping weak schools up to grade and for the elimination of bad teaching. The scheme of college entrance examinations is altogether a matter of temporary expediency. It tests merely the candidate's store of learning and to some extent his ability

to use that learning; it does not measure his intellectual desires, his moral strength or his aesthetic taste. Meanwhile it is our duty to find some way of assuring the intellectual ability which students must have on admission to college and at the same time of encouraging the preparatory schools to emphasize in their course of training the manly virtues and the liberal culture which all men need in life.

CHAPTER IV

THE OPPORTUNITIES AND RESPONSIBILITIES OF PROFESSIONAL SERVICE [1]

A QUERY and a criticism. — "How is it that the United States can afford to pay a half dollar in wages when we pay a shilling, and yet compete with us in the markets of the world?" This is a question that was addressed to industrial England by an English business man whose knowledge of industrial conditions in three continents qualifies him as an expert. When Mr. Mosely put that question he thought the answers could be found in American education. Accordingly, he invited a score or more of the leading teachers, ablest scholars, and keenest investigators of Great Britain to help him study American schools and methods of teaching.

What was the result? In the report of the Mosely Commission we can see ourselves as others see us — some others, at any rate — critics who tell us some unpleasant truths. These English experts, to a man, declare that it is not because of our schools that we succeed; some of them insist that if we keep up the pace it will be in spite of our schools and schooling. What is it, then, that gives us such advantage of our old-world neighbors? One answer is as follows:

"America's industry is what it is primarily because of the boundless energy, the restless enterprise, and the

[1] The Commencement Address delivered at the Alabama Polytechnic Institute, 1906.

capacity for strenuous work with which her people are endowed; and because these powers are stimulated to action by the marvelous opportunities for wealth production which the country offers. These conditions have determined the character of all American institutions — the schools included. The schools have not made the people what they are, but the people, being what they are, have made the schools."

Moreover, it is pointed out that our present schools are too young to have had any perceptible influence on our industrial activity or social life. Our leaders of to-day were trained under the old régime or have come to us from abroad, some with good schooling, others with little of any kind. Our workmen, the best of them, are self-trained or imported ready-made. The only native quality that we apparently have or exercise is, as Professor Armstrong says, "cuteness." And in this respect schooling is of little account. He says:

"In point of fact, American cuteness would seem to be conditioned by environment rather than by school education. The country was settled by adventurous, high-minded men; the adventurous and restless spirits of Europe have been attracted there for generations past; the conditions have always been such as to develop enterprise and to stimulate individuality and inventiveness: so that, during the whole period in which the continent has been gradually acquired and settled on, there has been a constant and invigorating struggle going on against nature in one form or another, the Indian probably having played no mean part in the education of the race. Such being the case, it is important to remember that some at

least of these influences are now withdrawn and that development may, in consequence, be along different lines in future, especially as the enervating influence of machinery is also coming into play more and more."

The causes of success. — In the introduction to this report Mr. Mosely discounts some of the findings of his experts. He points out that South Africa is a land of great opportunity, that it possesses enormous resources, that it has been settled by as brave a people as can be found anywhere, and that in all essential respects it is not unlike the United States or any other new country. Despite all this, he maintains, South Africa has not begotten great industrial leaders and that but for the trained American engineer South Africa would still be undeveloped and unproductive. He finds the secret of American success, therefore, in the American system of education.

Here are three reasons given by keen men bent on finding the causes of American industrial success: (1) A golden opportunity in a new country marvelously rich in natural resources, (2) the disposition of the typical American to take chances, to play the game to the end whatever the odds, and (3) professional training directed to practical ends.

No one can deny that these three causes have been potent factors in all our past. But what of the future? Is the opportunity what it once was? Will American shrewdness still find free scope? Shall we still have need of professional training?

The period of rapid development. — Seventy-five years ago we had a population of 17,000,000, the great West virgin soil, our forests scarcely touched, our mines

almost wholly undeveloped, our foreign trade of no account, few steamships, and less than 3,000 miles of railroad. No equal period in all history can at all compare with the two generations just passed in the creation of wealth and the exploitation of natural resources. It has been an age of unparalleled advance in man's ability to control and direct the forces of nature, the age of steam and electricity. "The United States has to-day within its borders," says an eminent economist (President James), "an effective power in the engines at work, far surpassing the total possible power of the entire population of the world a century ago. In many lines of work one man, with the aid of a small machine, may do as much as fifty or a hundred men could have done at the beginning of the century. While in other departments, owing to the development of the application of steam and electricity, one man may do what all the population of the world combined could not have accomplished a hundred years ago."

The spirit of pioneering. — The achievements of the last century, particularly those of the last score of years, are of such stupendous magnitude and so revolutionary in character as to fix a gulf between the life of to-day and that which our ancestors led when they began the conquest of this new world. The man who braved the dangers of the deep, for weeks together, in a sailing vessel, tossed about on an uncharted ocean and landed upon an inhospitable shore, had faith and fortitude and courage unknown to those of us to-day who think of a sea voyage as a pleasant relaxation from everyday toil. The prayer for the person going to sea is no longer suffused with the emotions which once characterized that formal appeal

to the "Eternal God who alone spreadest out the heavens and stillest the raging of the sea to guard the loved one from all danger, from sickness, from the violence of enemies and from every evil to which he may be exposed and to conduct him in safety to the haven where he would be."

The pioneer who set out alone to explore unknown wilds, or with wife and children turned his face to the setting sun to found a new home beyond the mountains, or on the plains, or across the great desert, was made of sterner stuff than his descendant who complains of the luxuries of the palace car and chafes under the restraint of a few minutes delay in making schedule time across the continent. The man whose success calls for individual initiative, whose subsistence is gained by the work of his own hands, whose life depends upon a quick eye and a sure aim, such a man is somehow radically different from the men of to-day. He belongs to a bygone age, to the days of homespun and log cabin and flintlock — the days of the simple life, the hardest kind of living.

The willingness to take a chance. — It is little wonder that the typical American has learned to take chances, that the gambler's instinct within him amounts almost to a passion, that on the thing he wants he will stake his last dollar, even life itself. Without this passion to win out or die in the attempt, a direct inheritance with our Anglo-Saxon blood, this country could not have been developed as it has. Without it we should doubtless be playing the rôle of a South American republic, or be like Africa, a bone to be snarled over by European dogs of war. As a people we have taken the chance that was offered to us a century ago and we have played the game, most of the

time with a lone hand. It has been a desperate sort of training, this game with fate and fortune, but it has developed a type of civilization such as the world has never before seen. It has raised up men who have dared to harness the steeds of the Sun and drive them abreast across our heavens from the Massachusetts Bay to the Golden Gate, men who have burrowed into the earth and brought forth light and heat and power that defy the limitations of time and space, men who have organized and directed commercial enterprises productive of wealth beyond the wildest dream of oriental potentate or of the avarice of imperial Rome.

The land of opportunity. — In the olden time men saw eye to eye, they stood shoulder to shoulder, and they fought hand to hand. Individual initiative, personal prowess, reckless daring, and persistent effort were the vital factors in securing success. These qualities are still important, indeed they are absolutely indispensable, but in the future that awaits the young American of to-day, it is a different kind of initiative and another type of prowess that is needed. The extraordinary increase of man's power over the forces of nature witnessed in the lifetime of those of us who are not yet willing to be called even middle-aged, has revolutionized communication and bids fair to put transportation by steam out of business. Who knows but the next generation may see new methods of transportation as far superior to the steamship and railroad as the telephone and telegraph are superior to the post rider and letter carrier? Who will search out these undiscovered forces and who will direct their use in ways beneficial to mankind? Who, indeed, if not the

young men, who are going forth strong to battle and confident of victory? If it be true that the life of to-day is far removed from the life of yesterday, it is equally true that the man of to-day far surpasses the man of yesterday, surpasses him, I mean, in ability to do simply because he has more power, infinitely more power in many ways, with which to do the work of the world. The youth of to-day have the hand, the eye, and the strong right arm that their great-grandfathers had, and I doubt not could, if necessary, acquire something of their skill and cunning; they have inherited their zeal and indomitable courage and, if need were to arise, would demonstrate it again as their fathers did before them; they are, or may be, all that the men of the past have been, but they are more — infinitely more — than their forefathers ever were simply because the intervening years have added untold wealth to the patrimony of every person who enters this new century. They are "the heir of all the ages, in the foremost files of time" and may be the possessors of the best the world can give. The fact that some will seize this birthright and lead the way to new conquests and enjoy new triumphs discloses the meaning of civilization. If human genius has increased the working efficiency of Germany ten- or fifteenfold in two generations, what may not be expected in young America in the next half century? "Better fifty years of Europe than a cycle of Cathay," sang the English poet eighty years ago. I say to you better fifty years of America than anything that the world has to offer. America still is the land of opportunity for us as it was for our fathers when they spied it out and took possession.

Popular history records an age of stone, succeeded by ages of bronze and iron and gold. But the age in which we live will surely go down in history as the age of power and wealth. It is an age in which man has counted less as a mere laborer and more as a human being than in any past time. Increased power means increased wealth, and wealth makes leisure possible. The widespread use of machinery on the farm, for example, makes it possible for the farmer to gain subsistence with less expenditure of time and labor than in the days of hand power; or if he works diligently and intelligently he may accumulate wealth in a manner not usually gained by tillers of the soil.

Science and natural resources. — The markets of the world are controlled by those who can best use the forces of nature. Danish farmers, I venture to say, are no stronger, no more diligent, no more anxious to succeed than are New York or Georgia farmers, and Danish farms are naturally no more productive than the farms of New York, and far less fertile than the best of the South or of the central West. But Denmark has been making good use of trained leaders. When, some forty years ago, she saw depression settling down on her agriculture like a mist, she set about finding the means of dispelling it. She sent envoys to the London markets to find out what was wanted; she established Agricultural Colleges to find out new methods of farming; she founded scores of Agricultural Schools accessible to all farmers' boys and girls; she sent out trained inspectors to advise and counsel with farmers on ways and means of improving their output; she set up testing stations where anyone might ascertain the quality of his goods; she organized coöperative agencies for

distributing and marketing her products. The result is apparent: Denmark has gained precisely that which New York and every other state in this Union lacks and some day must have — *leadership in fields to which modern science is applicable.*

The age of democracy. — I have said that this is an age of power and of wealth; I should add to this the further characterization that it is *par excellence* the age of democracy. The use of machinery driven by steam and electrical power has made possible great accumulation of wealth and has put the intelligent workman in possession of forces that are productive far beyond the productivity of any single pair of hands. It has made leisure possible, as I have said, to a degree unknown in any previous age. A man is more a man to-day than ever before. The power that he can wield is greater, and the leisure that he can find after earning his daily bread is so much greater than ever before that we are confronted with problems and situations never before met with in social life. Power of itself is not dangerous and wealth is not dangerous, but a democracy pledged to grant to each individual the greatest possible freedom supplied with wealth untold and capable of wielding irresistible power, may become either the greatest curse or the most signal blessing ever bestowed upon human society. No great nation that I know of has ever undertaken to grant a square deal to every man; no one has ever attempted to make every person fairly intelligent and capable of using his powers in any way that seems to him most fit; no nation has ever pinned its faith so implicitly to the good that is in the common man; no nation expects so much of self-sacrifice

and unselfish devotion from its leaders in public and private life. The American Republic is still on trial; it remains to be seen whether a "nation, conceived in liberty, and dedicated to the proposition that all men are created equal . . . can long endure."

Education a necessity. — The world offers no such opportunity elsewhere as lies just ahead of the young American who shares Nature's secrets and knows how to use the forces that Nature supplies. The leadership of the olden time may have been dependent upon the accident of birth, but the leadership of the time that lies just ahead is a matter of professional training. One may grow up naturally to be a leader of men on the field, or in the forum; it is conceivable that great statesmen or business men may yet be graduated merely from the "school of life"; but the day has passed when the great engineer is self-taught, or when the intending physician comes up from cleaning the old doctor's buggy to the mixing of pills and practicing on country folk, or when the law student attaches himself as office boy and copyist to some law office. The standard set to-day for the engineer, the physician, and the lawyer will be required to-morrow or the day after of the preacher, the teacher, the farmer, the statesman, the business man. Simple operations, even those of a professional character, may be learned by observation and perfected by practice, but few of nature's forces are simple when followed up. It requires no extraordinary intelligence, for example, to convert corn into pork — any fairly healthy hog will do that if you give him a chance — but it requires the patient research of the professional chemist, the skill of the engineer and the

practical capacity of the great business man to convert corn into the hundred and more different kinds of products now on our markets, ranging from Vermont maple syrup to guncotton and from glucose to pyroxylin varnishes and battleship armor.

Advancement of medical science. — Time was when smallpox, diphtheria, tuberculosis, cholera, and yellow fever were regarded as dispensations of Divine Providence, scourges of an angry God which might well terrify even the most stout-hearted; to-day, thanks to the advance of medical science, they have been shorn of their terrors and relegated to the list of preventable diseases. Modern surgery, thanks to methods of antiseptic treatment introduced by Lister and to the discovery of anæsthesia made by one of our own American physicians, has brought into this world within a generation more genuine thankfulness for the alleviation of pain and suffering than the human race since its creation has ever had cause to show. These conquests of medical science, and others of which no layman is competent to speak, are due, every one of them, to better knowledge of Nature's laws and to increasing professional skill. And how modern it all is. The man (Doctor Bowditch) who organized the first laboratory for physiological research and microscopic investigation in any American medical school has but recently retired from active service in Harvard University. In 1871, when he began his teaching, the Harvard Medical School was graduating physicians after one year's hearing of lectures with only a little dissection in the anatomy course. Think of it — no laboratories, no microscopes, no bacteriology, no hospital service, in the foremost University medical

school of this country — and that in the lifetime of most of my readers.

Growth of professional schools. — And how was it a generation ago with other professional schools; such as Schools of Law for example? Well, the one at Columbia University, under Professor Dwight, was certainly not inferior to any other that can be named. It was then a proprietary institution to which almost anyone who could pay the fees might find admission, and while eminently successful it bore little resemblance to the carefully organized, scholarly professional school which to-day admits only college graduates. The schools of engineering, I hardly need mention here. Fifty years ago there were only three in this country, and four-fifths of all we have to-day have been established in the last thirty years. Civil engineering then comprised practically the whole field; mining and mechanical engineering were in their infancy; electrical engineering, sanitary engineering, chemical engineering, and all the rest of them existed then, if they had any existence, only in the embryonic stage. As for our schools of veterinary medicine, dentistry, agriculture, horticulture, and the like, they are the product chiefly of the last quarter century. The professional training of elementary teachers has had a history of about sixty years, but I have personally had a part in building up the first University professional school for teachers in this country, or, for that matter, in the world.

The dilemma of the public. — Professional training on a university plane, training that seeks to make use of and apply the highest scholarship in every field of scientific research, is very, very modern. When I look

about me and see what has been accomplished in a few short years, I marvel at our attainments and take courage. When, on the other hand, I consider how far short we come of perfection, how we fail to do even that which we could do if only we had more time for study, greater skill in teaching, higher standards of admission, better equipment in library, laboratory, and shop. I feel like berating the public for its lack of confidence in professional ability and its want of faith in professional service. But these lapses are momentary. I know the world is full of quacks and charlatans whose sole business is to prey upon the ignorant and to get money falsely from those in need of professional service. I know, too, and I blush to say it, that there are those who have enjoyed the privileges of professional training, who have been for years together the recipients of public generosity and private beneficence, who have taken day after day the best that devoted teachers can give, but who seem to have no professional honor and to recognize no professional obligations. These are they of whom the world has a right to ask for bread and yet who, when asked, give instead a stone. The great fraternity of professional men has no greater burden to bear than that imposed by its own delinquent membership. There is no obstacle to professional success comparable to that set up by men professionally trained who lack professional instincts and professional honor. What wonder that the public finds it difficult to discriminate between the quack and the physician, between the honest engineer and the knave who slights his job, between the teacher who educates and the person who merely gives instruction! The success of

every professional leader is measured, not so much by his material accomplishments, by what he can *get* for himself, as by what he can do for others and the confidence he can establish in himself. Every professional man who fails to measure up to the highest professional ideals not only falls short of his own best good but positively harms every other man who would attain the best. No man can be a leader in any field who does not have the confidence of those who should follow him; no group of men can lead effectively if some of them are unable or unwilling to stand the test of professional efficiency.

The obligations of youth. — Standing as do the young people of America at the opening of their careers, facing opportunities which no one before ever enjoyed, equipped for service as few of their predecessors have been, they owe a duty to their profession and to society which demands the highest endeavor. They are what they are by virtue of parental devotion, social beneficence and professional training; the least they can do to honor those whose name they bear is to be true to themselves; the least they can do for their State is to repay its investment in them by upholding its standards of citizenship; the least they can do for their profession is to defend its honor and to serve it with loyalty and devotion.

The Hippocratic oath. — On every Commencement Day in my own university I hear the Hippocratic oath administered to the graduating class of our College of Physicians and Surgeons. It never fails to rouse in me the deepest emotions. When I realize that for centuries those entering the oldest of our learned professions have

sworn directly or indirectly to discharge those professional obligations which were as patent to the Greeks of two thousand years ago as to us of the twentieth century, I think I understand why it is that the good physician is jealous of his honor and how it comes that high and low, rich and poor, may appeal to the good physician in certain faith that to the best of his ability he will serve them all alike. Listen to that oath![1]

"Candidates for the Degree of Doctor of Medicine:

"In our profession it is a custom, established more than two thousand years ago, that no man may be admitted to its honors who has not first expressly taken upon himself its obligations. Now, therefore, in behalf of your elders, I call upon you to take, as we have taken before you, the oath which bears the name of Hippocrates. The language in which our predecessors first pronounced it is no longer spoken; the very gods whom they called to witness have been discarded; but still we can find no nobler words than the most ancient in which to hand down the traditions of our calling.

"You do solemnly swear, each man by whatever he holds most sacred:

"That you will be loyal to the Profession of Medicine and just and generous to its members;

"That you will lead your lives and practice your art in uprightness and honor;

"That into whatsoever house you shall enter, it shall be for the good of the sick to the utmost of your power,

[1] Introduction, by J. G. Curtis, M. D., to the "Hippocratic Oath," spoken annually at the Commencement of Columbia University.

you holding yourselves far aloof from wrong, from corruption, from the tempting of others to vice;

"That you will exercise your art solely for the cure of your patients, and will give no drug, perform no operation, for a criminal purpose, even if solicited; far less suggest it;

"That whatsoever you shall see or hear of the lives of men which is not fitting to be spoken, you will keep inviolably secret.

"These things do you swear? Let each man bow the head in sign of acquiescence.

"And now, if you shall be true to this your oath, may prosperity and good repute be ever yours; the opposite, if you shall prove yourselves forsworn."

Other professions call for no such formal asseveration of intentions. But I charge the youth of America, in the name of those who have gone before, in the name of all those who have contributed to that wealth of knowledge, that store of custom and tradition, that accumulation of spiritual gifts, which are so freely theirs, in the name of all those who have made their opportunity greater than that which they themselves enjoyed, I charge them to be men, good men, strong men, men ready to aid the suffering, to succor the weak, and to uplift the faint-hearted, men devoted to your profession, jealous of its integrity, faithful to its trusts and anxious for its advancement, men capable of leadership in this new century, and worthy of American citizenship, the finest flower of advancing civilization.

CHAPTER V

THE CALL TO PROFESSIONAL SERVICE [1]

THE choice of a profession marks a crisis in a young man's life. It is the end of a period of irresponsible living, of acquisition without purpose, and of expenditure without reward. It is the beginning of a period of self-direction and self-control, of struggle for mastery, of devotion to duty and service to others.

The selection of a calling. — No wonder that the young man — when I say "young man" I mean also the young woman with professional aspirations — approaches this crisis with strangely conflicting emotions. He is uncertain of himself. He has no means of knowing whether he is physically fit and temperamentally adapted to meet the strains of professional life. Nothing in his personal experience enables him to judge of his ability to excel in a particular professional career; and he has only the most superficial views of the duties and obligations of any kind of professional service. But the necessity of making a living drives him on. He is attracted by the prizes that reward the successful practitioner and he longs to do something that will count in the estimation of his fellows. His youthful optimism buoys him up and he dreams of the good he may do. The choice is made despite the doubts which arise and which occasionally continue to harass until he finds himself, years afterward, in and through his professional work.

[1] A revised reprint from the COLUMBIA UNIVERSITY QUARTERLY, December, 1908.

Since many of my readers have either chosen a professional career or are in the way to do so, I shall discuss some aspects of professional service. I purposely limit the scope of this survey, because some things are obvious to all who have eyes to see what is going on about them, and because some things may safely be neglected in addressing an American audience. Therefore, I shall say nothing of the relative importance of the professions. It is obvious that any profession has its advantages and disadvantages — for some who contemplate its exactions; and that all are in need of the uplift that comes through strong and capable men. We may safely neglect, too, the pecuniary rewards of professional service, for who is not aware that the laborer is worthy of his hire and that in every profession the assiduous devotee is assured of a decent living? There is opportunity, abundant opportunity, in every field, and no one need turn aside from any preferred course for fear that it will not yield the necessaries of life or give free scope to honest effort.

Professional service. — I use the term *profession* in a liberal sense, as any vocation in which specialized knowledge is rationally, ethically, and skillfully applied in practical affairs. In this sense we recognize professions of engineering, teaching, agriculture, architecture, banking, military affairs, and the like, as well as the traditional professions of theology, law, and medicine. With increasing knowledge, higher ethical standards, and more rational practice we shall some day have professions of merchandising, journalism, housekeeping, nursing, pharmacy, dentistry — possibly even a profession of politics. Some occupations are debarred from

the professional class because of lack of scientific attainments, others by want of an ethical code, and a few by reason of insufficient technical skill. Conversely, any profession may be debased by practitioners who profess what they do not know, or cannot do, or who fail to recognize the moral obligations of their position. Professional service implies the possession of knowledge and power restricted to the few, but denied to the many. It implies leadership and bespeaks leaders who are worthy of the trust that the many should place in them.

The function of the university. — The relation of the university to the professions is clearly apparent. The function of such an institution as this, indeed its sole function, is the training of leaders. First, in its quest for new knowledge in every field and in its provision for giving instruction in what is known, the university discharges its foremost duty to the professions that it represents; second, by formal teaching and through the influence of its social life the university promotes those ideals of social conduct which obtain between man and man; finally, in its professional schools, the university seeks to organize knowledge for professional ends and to give training in acceptable methods of procedure.

The obligations of service. — The man who chooses a profession deliberately purposes to become a leader of men. He takes advantage of opportunities for study and training which few can enjoy. He equips himself for work in which he has few equals and may have no superior. He professes to be able to do what the many wish to have done but cannot do for themselves, and he invites the confidence and support of those who lack his

ability. The professional man, therefore, voluntarily assumes obligations which can be adequately met only by the most conscientious preparation maintained throughout a lifetime of devoted service.

The value of a liberal education. — We must distinguish between the preparation necessary to enter upon a professional career and the equipment essential to the highest success in a particular profession. Time was when most of what was needed could be acquired in professional practice. The apprentice system did enable the beginner to assimilate the accumulated experience of his masters and to acquaint himself with the ethical standards of his colleagues. When knowledge was limited, experience counted for much, and the graduated steps in the advancement of the novice gave him that understanding of human nature without which no one may aspire to be a leader of men. To-day there is much to learn before professional work can be begun. Every decade sees scholastic requirements advanced and insisted upon. The maximum of to-day is the minimum of to-morrow, just because we are adding daily to the knowledge that honest professional men must use in their practice. The only question of an academic nature that can be raised is where to draw the line between what is essentially preparatory and what can safely be left to later acquisition. There is no limit to what the professional man needs short of the furthermost bounds of scientific knowledge applicable to his professional work. Indeed, he must go further than merely professional needs. He who would be a leader of men in any profession must see his work in its relation to the work of other men, see it as a part

of a greater whole in which all things work together harmoniously in the upbuilding of a higher life. This, I take it, is the justification of a liberal education preparatory to the professional course. It appeals to me as a higher motive than that of personal gratification or general culture. It means knowledge of use, directly or indirectly, in promoting a better civilization.

The opportunity of the student. — The student who begins his professional course in a modern university finds it a storehouse of knowledge. A part of what is taught may be unscientific and much of it may be poorly organized and inadequately presented, but these are the problems of scholarly research and university administration. No student in our university classes need languish for lack of intellectual stimulant or hunger for substantial mental pabulum. The honest student may discover our defects, but he will have no time for faultfinding. He will be too far on the road to discovery to share his secrets with the uninitiated. The most serious obstacle to the advancement of the professional student is the presence in our classes of those unable or unwilling to keep the pace. An inscrutable Providence, it may be assumed, inspires to professional study even those who are least capable, but why they should be inflicted is a mystery understood only by those who know why you get measles and mumps and second teeth. You may endure stoically the blunderings of your incapable associates, they will always be with you, but you have a right to resent the interference of those who are able to keep step but refuse to do it. It is a curious commentary on student life that those who deliberately seek to retard

the advancement of a class by "bluffing" the instructor or absorbing an undue proportion of his attention, should ever be tolerated by honest students. It is perhaps still more remarkable that those who intentionally and persistently shirk class duties deceive themselves in thinking that it is of little consequence.

Why such self-deception? Who has not sized up every classmate from the primary school on? One knows every shirk and every trickster with whom one has been associated. In the ordinary course of events the associates of these defaulters in years to come will know them as their associates do now. Talent and brilliancy cannot redeem such reputations. Some day when you wish to retain a lawyer in an important case you will not turn to the man, however brilliant or talented, who tricked you in class. You will never entrust your life, or the life of anyone you are responsible for, to the care of that physician who undervalued scientific facts and jumped at conclusions in the classroom. You will place no confidence in the business man who as fellow student could not be depended on to do the fair thing. When the crucial time comes you will search out the man who knows how to do honest work, and you will prefer him for his straightforwardness rather than for any other qualification. Your way in such cases is the way of the world. It is the penalty — silent, unobtrusive, but no less effective, — that society inflicts on those who shirk its responsibilities. No further explanation is needed of the failure of some men to attain commanding success.

The need for socialization. — He who would be a leader in professional life should understand human

nature. He needs an intimate knowledge of his fellow men, quick insight into human passions and prejudices and a sympathetic understanding of man's ambitions and aspirations. He must be willing to bide his time and know how to act when the right time comes. In all his dealings he must exercise tact and common sense. In a word, he must know how to get on with his fellows.

There is no factor in professional equipment so difficult of acquisition as this personal one. We take it for granted, other things equal, that the man who has it will succeed and that without it failure is almost certain. Strange that in our training courses we take no account of it. We seem to forget that while we are born with social instincts, we learn by experience the traditions of social life and acquire painfully the habits and customs of those among whom we live. A man learns how to get on with his fellows and how to lead them just as he learns everything else worth doing. A Robinson Crusoe existence is no preparation for social living.

The ethical import of professional service requires that the professional man maintain a healthy interest in his fellows. He may not divorce himself from those whom he serves or from his professional colleagues. He should not live to himself alone, least of all during those years of preparatory training when habits are being fixed and customs established for all one's later life. This, I take it, is the justification of all our so-called college-life, our clubs and fraternities, newspapers and periodicals, debates and athletic sports. We need them — the more the better, provided they are well conducted and kept within their proper sphere.

The value of college athletics. — Much has been said of late concerning American college sports. It is pointed out that relatively few engage in them, that they are unduly expensive, that they absorb too much time and are attended by serious abuses, and that instead of manly sports they have become games in which the determination to win outweighs all other considerations. It is a pity that such charges can be brought against a legitimate activity of student life and a greater pity that our students do not themselves make such criticism impossible. Despite all criticism, however, college sports and athletics are here to stay until something better is found. They afford healthful pastime for many who take only unimportant parts. There is variety enough to hold the interest of all who can be induced to coöperate with their fellows. Note the list: walking, running, jumping, hurdling, vaulting, throwing, wrestling, fencing, boxing, tennis, rowing, lacrosse, baseball, basket ball, and football. Yes, even football, the most maligned of all, is worth playing, provided it can be a clean sport. I have no fear of serious harm from a few bruises and sprains and broken bones. All these will mend. They are the price youth pays for good health and animal spirits; they are part of the cost of learning how to get on with one's fellows, how to lead and be led in the practical affairs of life. The curse of it all is its taint of professionalism, a misnomer, by the way, because true professionalism, as I have tried to show, is guided by the highest ethical motives. The fault lies in exaggerating the element of contest and in making the determination to win paramount to all other considerations. It is the same kind of mistake that some

college students and some college professors make when they consider the acquisition of knowledge, however valuable, an end in itself. A more wholesome view, in my opinion, is that both college studies and college sports are means to ends, the chief purpose of which is not the winning of the game.

College fellowship. — The social life of our American colleges is rich in educational possibilities. I would not limit the activity of any decent club, or society, or association of students in which men get acquainted with one another, learn one another's strength and weakness, and become familiar with the ways of thinking and acting that prevail in student life. Here they learn to give and take. Under the stress of such social intercourse the youth restrains his personal whims, modifies his family prejudices and becomes one of a social group, a group which ought to be typical of the best the world has to offer. If our college life falls short of this high ideal it is due to the frailties of human nature and the inexperience of college students.

There never was a time when college life was cleaner, freer from immoralities and youthful excesses, than it is to-day. The typical college student is honest of purpose, fair in his dealings, upright in his life, and enthusiastic in his interests. The college community is far safer than city streets or country villages. Some there are in every community who transgress the limits of propriety. We know the college student who thinks it smart to have his fling, and we hear the excuse that one must know the seamy side of life in order to cope with it. But the honest student is fully aware of the fallacy. He knows

that in order to cope with snakes he doesn't need to crawl on his belly. The man who debases himself can offer no excuse for it save that of selfish gratification.

University ideals. — If university studies afford the substantial materials out of which the professional man carves his career, it is equally true that his college life is the medium in which he develops his standards of personal worth. The professional school seeks to organize the scientific knowledge within a particular field and to adapt it to practical ends. The way in which this is done, the character of the instruction, the spirit of the instructors and the tone of the place determine in a large measure the ethical as well as the scientific status of the school. Careful, exact, conscientious workers are not trained by teachers who are indifferent to scientific accuracy in the classroom and unresponsive to the claims of the profession they represent. On the other hand, we appreciate the inspiring uplift of the great teacher — the man who through devotion to his subject leads his students to a clearer vision of the truth as he sees it and rouses within them the ambition to give equally noble service. But however great the skill and inspiring the presence of teachers in a professional school, they cannot supply all the training that a professional school should give; they cannot give that which students should give to each other. Just as college life furnishes the means of quickening the social and civic conscience of college students, so, the professional school needs a life of its own for the promotion of professional ethics and the development of professional morals. The student of law should enter upon his life work not only familiar with legal facts

and procedure but also helped by his fellows to appreciate his position as the peacemaker of society. The teacher should go out not merely grounded in the subjects he will teach and skilled in giving instruction, but also eager to serve society in the way that he knows others of his fellows can and will serve it. The engineer who makes railroads, builds bridges, devises and operates machines, constructs canals and aqueducts, and directs great industrial plants should somehow come to realize that his chief end is not the making or saving of money for himself, or for anyone else, but that he is a responsible factor in the present industrial order for the betterment of social conditions. Is he likely to get that notion in his active career, urged on, as he is sure to be, by business competition and the thirst for gain? Will the solemn promise of the medical graduate to observe the vows of the Hippocratic oath be of much avail if during the years of his preparation the full import of that historic formula is not borne in upon him by all the force of example in his daily intercourse with teacher and fellow student?

Ethics of the profession. — Great as is the need of scientific attainment in every profession, there is even greater need of moral responsibility. We want lawyers, physicians, teachers, engineers, business men, who not only know how to do things but who will also insist on doing them right — men who, conscious of their ability as leaders, are jealous of their professional honor — men who will readily sacrifice personal gain to uphold the dictates of conscience in their professional service. The professional school is the place above all others where such ideals can be impressed upon young men. There

is no time in life when men are so susceptible to generous impulse and no place where so many can be influenced at once. But, as I have already said, it is not the work of teachers and faculty alone; it is preëminently the result of the interaction and interrelation of students engrossed in a common undertaking and stirred by a common ambition to make their lives count for most. The duty of the student is to join hands with teachers and fellow students in making these years of professional study also years of growth into professional stature. The life outside of class can be so ordered as to reënforce and supplement the instruction received. It is serious work to which the student puts his hand and he will be held strictly responsible both by his own conscience and by the judgment of his fellow men for the way he performs this task.

The inspiration of professional service. — The call to professional service comes to young men in the form of imperious command. If it were the call to arms in the defense of country they would respond by tens and hundreds, and not one would falter whithersoever duty led. This call to service which I voice comes from fellow countrymen who are engaged in that everlasting war with sin and ignorance and greed and selfish ambition. They call on us to equip ourselves for leadership and they confidently expect us to stand forth when the time comes, fully prepared to merit the confidence they would place in us. They have put at our command all the resources of the universities which bring to us the wisdom of the ages and line us up with the great men who have preceded us. It is an inspiring company of leaders in statecraft,

theology, law, medicine, business, engineering, and in all arts and sciences of every field. No one of those whom we to-day call great, no one whose life we would set up as a measure of our own, has failed to respond to that appeal in the cause of righteousness which comes to all in the call to professional service.

CHAPTER VI

THE SCHOOL AND INDUSTRIAL LIFE [1]

THE American school is under fire — it is always under fire. Just now it is said that its curriculum is overloaded with fads and frills which burden the child and hamper his training in subjects essential to his success in life. Public opinion is critical of a system which makes easy the advancement of a few to positions of commanding influence, but which provides no vocational training for the many who cannot afford to remain in school beyond the elementary grades. The demand is for equality of opportunity in education without regard to social rank or wealth or any special privilege, that kind of equality which enables one to become a good American citizen, and which, as I understand it, is established on the ability to earn a decent livelihood and the determination to make one's life worth the living.

The motor element in learning. — The instruction given in our public schools is chiefly of two kinds: (1) humanistic, including language and literature, history and civics, and the fine arts; and (2) scientific, including mathematics, geography, physics, chemistry, and biology. Our schools also provide for training in the practical arts which are required in the study of these subjects, preëminently the arts of reading, writing, singing, and drawing. Of late years the attention given to hygiene

[1] A revised reprint from the EDUCATIONAL REVIEW, December, 1909, used by courtesy of the publishers.

has begotten systematic training in gymnastics and athletic games. Our school work, however, is bookish, a term of reproach with some, but properly understood it stands above criticism. That which is worth knowing about human progress is for the most part contained in books. The scientific studies, as well as the humanistic, have been recorded in books; indeed, it would hardly be creditable to our civilization if the achievements of one generation were not made available for the generations that follow after. And what form is more enduring, what form more available, than the writing which may be read by all who are willing to master the conventional arts confirmed by use and tradition? If our schools are culpably bookish, it is because our teachers misuse the book and confound methods of teaching with the acquisition of knowledge. Given something to learn, whether contained in a book or not, it is the teacher's business to see that the learner approaches his task in such a way as to make his progress certain and the results secure. If motor expression will help ease the way or better define the end, the good teacher will surely use it. And one should know that reading, writing, and singing are as truly means of motor expression as drawing or dancing or handiwork. In so far, therefore, as the aim of learning is to acquire knowledge, there is no good reason for spending an hour in manipulation when the fact may be as well taught without it in a minute. On the other hand, the fact which calls for motor expression and the process which demands technical skill, may never be acquired in their completeness without persistent drill. But drill for the sake of technical

skill is one thing; motor expression for the sake of clarifying, strengthening, and assimilating knowledge is another thing. To learn by doing is well enough, if there is no better way; to do, without learning from it, is to drop to the level of the brute, a travesty on pedagogical insight.

Manual training in school curricula. — The significance of motor expression in the learning process came to consciousness in our schools only a generation ago; indeed, we are only now becoming alive to its place and possibilities. Some got the notion at first that there was a magical charm in the training of hand and eye. Manual training was heralded as the remedy for all defects of vision, mental and physical, and the claim was made that in whittling paper-knives out of wood the boy was really shaping his own character. To follow exactly the specifications of a blue-print drawing was thought to be the surest way of bringing home the lessons of honesty, sobriety, and truthfulness. Until within ten years, manual training was defended by its overzealous advocates on the grounds of its value as a mental and moral discipline. It is difficult for us to see, even after the lapse of so few years, why such great worth was imputed to manual dexterity and so little value attached to good reading or legible writing or correct translation.

It is past our comprehension, even now, how anyone could have supposed that mere doing could rank in educational value with the doing of something worth while. The fact is, of course, that no one really thought, regardless of what may have been said, that making nothing and making something were one and the same. The early

projects in manual training may seem to us trivial, but their value is not to be reckoned in terms of accomplishment, but rather in terms of effort. They represent an effort to secure at any cost the motor expression demanded by child nature. If the teacher of the humanities and the sciences would not employ it intelligently, here was a group of enthusiasts who would use it anyway, unintelligently, if necessary. Public opinion, not always a safe pedagogical guide, supported them, and the result is a place in the curriculum for a subject which few know how to teach and which perhaps no one should teach in the way at first proposed.

In supporting the demand for manual training in the industrial and household arts, public opinion outran the educational theorists. Fathers and mothers care relatively little for formal discipline of any kind. They want tangible results. They want their children to be able to read, write, and reckon. Some go so far as to ask for an appreciation of good literature and the fine arts, and a working knowledge of history, civics, and the sciences, but such are always in the minority. The one thing that every parent wants, the one thing that gives him most anxious thought, is how best to make his child self-supporting. In manual training he sees a chance to develop that skill of hand required by the craftsman; in the technical processes he discovers a likeness to the processes with which he is acquainted in the home or in the industrial world. The study promises material reward and he seizes the chance to turn it to account in the vocational training of his child.

The development of applied design. — Manual train-

ing in some form is here to stay. The teacher needs it in teaching not one subject, but most subjects; the public demands it because it offers the most obvious means of beginning the training for vocational life. Under the combined influence of pedagogical needs and public demands, the content of our manual training courses has been radically changed within the past decade. In the effort to give free expression to the child, all manner of projects have been carried out through handwork. Woolly sheep have sported with polar bears under fir trees set in a desert of sand. Bookbinding and block houses, Indian war bonnets and water wheels, inkwells and Navajo blankets, bent iron jimcracks and raffia baskets, book shelves and dolls' clothes, broom holders and picture frames — all these and a thousand more mixed up in indescribable confusion! Is it any wonder that someone should raise the cry of fads and frills? The wonder is that anyone should try to justify such work in school on any ground other than mere recreation. Absurd as it may seem when one reads over a list of manual projects actually put before our children in school, there has been consistent progress along two lines: (1) in the usableness of the completed article, and (2) in the design and artistic finish given to it. The difficulty of children's making really usable things contrasted with the ease of executing artistic design has largely changed the character of manual training within the past ten years. In fact, manual training to-day is little more than applied design. In this respect it is quite worth while. It is the best thing that has come into our schools in recent years, and we cannot afford to lose it.

Manual training as applied design is a subject quite different from the sloyd and formal projects of twenty years ago. If manual discipline is no longer wanted for itself, one may ask why the term manual training should be retained. Why not combine with drawing and call it all "art" or "applied design?" Another question — Why should we have distinct courses in the household arts in the lower grades of the elementary schools? The work done in these lines is either applied design or training in the technic of housewifery. This consideration raises another question: What is the place of vocational training in the elementary school?

School levels and specialization. — One characteristic of the American school system is apparently fixed. The work of the first six years of the elementary school is fundamental, the same for all regardless of sex or future occupation. Six years of schooling is the usual legal requirement, and there is a consensus of opinion that specialization should not begin before the twelfth or thirteenth year of age. Some would defer it two years or more, but the number of children leaving school at or before the end of the sixth grade warrants the attempt to make the work of the first six years of the elementary course complete in itself, and as comprehensive as possible. Such a course should be cultural in the best sense, a course calculated to put the child in possession of his inheritance as a human being and fit him to enter upon whatever work may be expected of him in the years immediately following. With six years of good fundamental training, the child is ready at thirteen or fourteen to look forward to his life work. The physiological age

suggests differentiation for the sexes. For those who go to college, it is time to begin specialization along academic lines; for those who are to become artizans or farmers or tradesmen, as soon as possible, it is time to begin vocational training. Specialization at the age of twelve to fourteen years should begin gradually, and in the vocational lines it should be essentially preparatory to the later years of trade school or apprentice training. My point is that when the boy or girl hears the call of vocational life, specialization should begin and gradually narrow into technical training for specific occupations — for some at the age of twenty-five in professions; for others at the age of sixteen in the trades. Between these extremes will be found most vocations in which men and women engage. A fundamental course of six years, at once cultural and preparatory to the widest possible range of differentiated courses beginning with the seventh grade, is the chief desideratum of our American school system.

Study of economics for perspective. — The present curriculum of our public schools, as I have already shown, is chiefly composed of humanistic and scientific subjects. We have made an attempt to introduce certain industrial and household arts, but they are so lacking in coherency as to raise serious doubts of their value as fundamental subjects. Nevertheless, there is another subject of instruction as fundamental as any now contained in the curriculum. If the humanistic studies are essential in the training of the child in his social relations, and the scientific in his relations to the physical world in which he lives, it is equally important that economic studies be included in the curriculum to provide instruction

in the industries from which man gains his material possessions.

Of course, I do not mean to include economic studies in the elementary school for the sake of technical training in any industry any more than I advocate the study of poetry in the grades for the training of the poet, or design for the artist, or biology for the physician. I mean the study of industries for the sake of a better perspective on man's achievements in controlling the production, distribution, and consumption of the things which constitute his material wealth. For these he labors for life; on the use he makes of them depend much of his own happiness and the well-being of his fellows. It is only by means of such studies, whether pursued systematically in schools or picked up under the adverse conditions of after life, that we acquire the basis of judgment concerning the acts and aspirations of our fellow men, either those who provide the capital for exploiting natural resources or those who do the work required in the several industrial pursuits. In our political life, no knowledge is of more consequence than that which is concerned with the relations of capital and labor; for us, as a people, there is nothing more to be desired than a sympathetic understanding of the conditions under which men earn their living. Is a liberal education possible in this age without a knowledge of these things which more than all others make men free or leave them slaves?

Defining life-aims. — A threefold division of the curriculum — humanistic, scientific, industrial — has the advantage over the present twofold division not only in providing a more liberal education, but also in affording a

better preparation for the differentiated courses which begin in the grammar school. The training now given in language and literature, and in the arts and sciences of the elementary school, is of prime importance as a preparation for any course that a child may pursue later on; in some respects, no other training can approach it in practical worth even for the work of the lowest grade of trade school. Nevertheless, it is an assured fact that our boys and girls do not enter industrial life with the same confidence that they exhibit in other fields for which their academic training has fitted them. They see no fascination in industrial activity and they have no basis of judgment for choosing any particular career. The fault is largely due to avoidance of industrial instruction in the schools, as something degrading if not positively unclean, and the setting up in its place of unattainable ideals at variance with the actual conditions of society. I would not check the ambition of any American child, however high his goal — it is his birthright as an American citizen — but I would have the school help him define the aim of his life in terms of his own natural endowment and possible attainment. The child has a right to this kind of guidance; the school must give it, and what the school gives must be determined by sympathetic instruction along the lines leading to the goal.

Revision of present practices. — The public, in giving support to manual training and the household arts, undoubtedly intends these subjects to promote closer relationship between the school and vocational life; some teachers of these subjects unquestionably do use them with precisely this intent; but efficient instruction pre-

supposes something definite to teach and a consistent way of teaching it. Subtract from our present manual-training course that which is essentially applied design and those exercises which are intended to afford motor expression in the learning of other subjects in the curriculum, and what is left is an incoherent, unorganized series of projects without purposes or educational value. However good the artistic treatment, and however desirable the assistance given in acquiring knowledge of other subjects, the results now obtained contrast most unfavorably with what might be secured from a series of projects harmoniously organized to attain a specific end and at the same time incidentally to provide for the necessary motor expression and all needful application of artistic design. In other words, motor expression and art training may as well be secured as by-products in doing something worth while as by making them ends in themselves. Whatever value may attach to the subject matter in such procedure is clear gain. The plan I propose, therefore, is intended to retain all that is of real worth in manual training and at the same time to get something still more to be desired. It is precisely the plan long followed by good teachers of reading and writing. The child in his reading may as well read the best of literature as the poorest, and in writing learn how to express himself clearly, concisely, and in good form as to follow everlastingly a copy plate.

It may be interjected at this point that some teachers of manual training have used the subject as a means of introducing the child to the complexities of social life, that it has been a means of socializing him, that it has

given him a chance to find himself in the midst of a highly artificial and conventional environment. If this be true, and the aim is certainly not an unworthy one, the end may as well be attained by putting the activities proposed on the high plane of real life.

Social needs and subject matter. — The problem, then, is to organize the information within the industrial field in such a way as to make it valuable, first, in the education of the masses and, second, in technical training for specific vocations. There is no lack of information; what is knowable in any industry is beyond the reach of anyone save the most expert specialist, and even he is tantalized by his inability to grasp all within his reach. That a field is large, overwhelmingly large, ought not to deter the educator from entering it. The scientific field, for example, is large, overwhelmingly large, but when it is systematically classified the teacher is in a position to select that which may have educational value even for the youngest child. Without classification it might be possible to teach much of practical value, but the school course from infancy to adult life would present a sorry spectacle. The logical arrangement of scientific information is the only criterion of the worth of the completed scientific course. The selection of materials for presentation at any particular stage depends upon pedagogical insight which takes into account both the goal to be reached and the peculiarities of the learner. The way in which children learn determines the method of approach to any subject, but it sets no standard of worth upon the acquisition. The only criterion of excellence is to be found within the subject itself in its relation

to human needs. How the child learns that $2 \times 2 = 4$ is a problem in psychology; whether 2×2 is actually 4, what relation it bears to other mathematical facts, and whether it is worth learning at all, are problems reaching far beyond child psychology. In classifying the information within a given field, we establish standards by which we judge the relative worth of component parts and discriminate between what is essential or characteristic, and what is accidental or accessory. Such categories we have in the humanities and the sciences, and they control the trend of instruction throughout the school course. We need such a guide to the industries in order that every step from the kindergarten on to the technical school may fit into our plan for industrial education.

Selection of subject matter. — Much confusion in the work of manual training has come from a failure to distinguish between the psychological guide to methods of teaching and organizing subject matter, and the logical guide to the sequence of topics and the value of the component parts. The need of food, clothing, and shelter, for example, is easily brought home to a child. The psychical reaction to the suggestion that he satisfy these needs for himself is an excellent starting point for the study of primitive life; it gives a splendid clue to ways of approaching certain fundamental industrial processes, and for that purpose may often be used advantageously in teaching. But to set up this principle as a guide for making courses of study is to confound means and ends. Everything worth having in this life has a place in the gratification of human wants — language and literature, science and fine arts, politics, law, and religion, no less than

food, clothing, and shelter. What is suitable food, how it is produced, distributed, and prepared for eating, and what becomes of it in nutrition is a subject for study quite apart from the satisfaction of hunger. The need of sustaining life may make the study of great importance, but it suggests no classification of the knowledge abounding in the scientific and industrial processes. Likewise the need of speech for the interchange of ideas gives no clue to the systematic structure of language, to say nothing of the vocabulary and the grammatical characteristics of any particular language. The conclusion, therefore, is that the method of rediscovery of ways and means of satisfying human needs is no sufficient guide either to what children should learn or to the sequence of materials employed in instruction.

The industrial processes by which man acquires his material possessions and shapes them according to his desires, are directed to the transformation of natural resources. Raw materials are produced and worked over; they are distributed and put to use. Each step, if properly taken, adds to their value. What constitutes value and what means are employed to effect the change should be made the subject of instruction. True, the amount of human labor involved is immeasurable, the variety of human occupation almost inconceivable, and the range of productive activity well-nigh beyond our understanding, but the fundamental processes are limited and relatively simple in their operation.

Studying products of commerce. — For pedagogical purposes, the materials of most significance in the industries are (1) foods, (2) textiles, (3) woods, (4) metals,

and (5) clays and other allied earth materials. Fuels, supplying great industries in themselves, occupy a middle ground between industrial materials and the motive power employed in the industrial arts. Commerce is that industry which uses the products of all other industries in making things available for human consumption. This classification has the advantage of fixing attention on the stuffs out of which things are made and upon which human ingenuity brings to bear its most lavish expenditure of industrial effort. The next step is to single out the dominant processes in the successive stages of production, manufacture, and distribution, and their interrelations, peculiar to each class of materials. The facts concerning these processes constitute the subject matter of instruction in the industries. The technical skill required in the operation of any industrial process is the object of vocational training.

The curriculum in industrial arts. — A well-organized course of study in the industries must be the joint work of technical and pedagogical experts. The scientist will be called upon to contribute his share, and his contribution will be no inconsiderable amount. At one stage of the course, emphasis may be placed upon the processes of production; at another stage, the stress may be upon manufacture, distribution, or consumption. Nature study, agriculture, the fisheries, forestry, and mining will furnish indispensable information. Geography, biology, physics, and chemistry will each add its quota of knowledge. Facilities for transportation, the production and transmission of power, and the agencies of trade and commerce will have a bearing on the problem. But the

chief consideration in the course of study is the ordering of the industrial processes by which raw materials are transformed into things of greater value for the satisfaction of human needs.

Historical development of industry. — The simplest industrial processes are often the most primitive. This fact suggests the desirability of sometimes approaching the study in the primary classes from the historical standpoint. To make the study of primitive life, however, the dominant purpose of instruction leads to the introduction of much superfluous material which tends to crowd the curriculum and overburden the child. Wherever the approach can be made advantageously by way of primitive life or by plays and games which express children's emotions, that method may be employed. The impetus gained in this way should be directed to the apprehension of the systematic knowledge contained in the field under consideration. When textile processes, for example, are to be studied, the need of clothing may be emphasized and means suggested for gratifying the want. Projects for carding, spinning, and weaving may be carried out in simple ways and illustrated by reference to actual operations in bygone times or by the practices of contemporaneous primitive people. But to rediscover every step in the original development of these arts is to miss the purpose of industrial education; it may be good industrial history, but it is not good industrial training.

The industrial aspects of the study, as distinguished from the historical, require that the child should acquire in some way and at some time — presumably in many ways and at widely separated times — a fairly well-

rounded conception of textile processes and should become familiar with the most important types of textile products. It is not enough to acquire a knowledge of the primitive process of spinning, even spinning on a wheel, and then to pass on to the weaving of a simple rug. Spinning is an important industry in modern life; it means yarns for all manner of fabrics made from a great variety of raw materials; it means thread of all kinds; it means cordage. How many of our school children, how many adults, have any adequate conception of the extent of these industries or their bearing on everyday life? And yet the processes are simple, and, by actual demonstration, supplemented by illustrations cut from current magazines or by visits to neighboring factories, the lesson can be taught in such a way as to make the learning a delight and the knowledge a permanent possession. On leaving the elementary school, every child should know, it seems to me, the characteristics of cotton, wool, silk, and linen, both in the spun and woven forms, and have some notion of their value as determined by the processes to which they have been subjected. A proper combination of handwork, the application of design and the giving of information should produce the desired results without strain and with constantly increasing interest in the study. At the end of a high-school course, possibly at the end of the grammar school, a girl should be able not only to make many articles of clothing, but also to discriminate in the choice of fabrics by reference to what she has learned in school concerning the nature of the several materials and the processes of manufacture. If she doesn't get this knowledge in school, when and where

will she ever get it? And isn't it something which she has a right to know? How much time will it take, I ask, to give her a vastly better equipment in this field than ninety per cent of adults have to-day? It is less a problem of instruction or school administration, than it is a point of view and selection of materials for instruction. Once accept my proposition that this is worth doing, and the time can easily be found, and some day we shall have teachers prepared to do the work.

The evolution of ceramics. — Again, let me illustrate from another field — from the clay industries. Children like to make mud pies. The kindergarten turns this aptitude to good use in fashioning things by hand molding. Of late, primary teachers have adopted clay as a convenient medium for expressing art forms. The result is thirty plaques, thirty inkwells, or thirty vases — all very pretty, decorated and glazed, when put in a row on exhibition day. So far I have no criticism. My complaint is that they stop right there. The chief processes in the clay industries are very few: hand molding, turning on the potter's wheel, pressing into set forms, and building up in permanent shape, as in cement and concrete construction. Why not, then, pass from hand molding, which can be approached through primitive types, to the use of the potter's wheel? A single demonstration of this machine, with the use of illustrations which may be had in abundance, will give the clue to the entire round of the pottery industries. A few samples, varying from unglazed earthenware to fine china, will complete the teaching equipment. Next come brick and terra cotta. But who has ever heard of brickmaking in school? I

should like to hear of it because it is an immense industry, the products of which are visible on every hand — soft brick, hard brick, fire brick, red brick, yellow brick, ornamental brick, terra cotta. Why should not our children know more about these things than we do? I venture to say that ten hours of instruction judiciously spread over two or three years, and properly correlated with nature study and geography, will give to sixth-grade children a better appreciation of one of the staple building materials than ninety out of every hundred adults have to-day. Is it worth the time? If so, the time can be found.

I might illustrate my point by any of the staple foods, by glass, by woods, or by metals. The working up of these materials, the getting them ready for use, does not involve many processes. The combination of processes is most intricate and the variety of products simply indescribable, but with an eye single to typical ways by which raw materials are transformed it is not impossible to leave with twelve-year-old children a lasting impression of the modes of operation in any industry and the nature of the most important results.

Strengthening the curriculum. — I am well aware that this plan will be criticized by some as being retrogressive, a return to a logical control of childish activities, and by others as abandonment of the new education through motor training. It may mean revolution, but if it results in a richer and more unified curriculum one critic is answered, and if the curriculum is thereby simplified the other critic will get no hearing from the American public. But how is the curriculum strengthened? First, it must be

conceded that the content of industrial education, as I have defined it, has some value; whatever that may amount to is a distinct gain. In the second place, the plan calls for richer courses in arithmetic, nature study, and geography. The quantitative measurements of arithmetic will find concrete application in every step of the industrial process from the first step of production of the raw materials to the end of the series when goods are turned to practical use. How much, how many times, how often, in what proportion, at what cost, are questions which must be answered by the child at every turn. The computations called for in the manufacture, transportation, and final distribution of any commodity are in daily use in trade and commerce, and should be the staple requirement of the school. Nothing will vitalize the study of arithmetic more than to create in the school a *need* for quantitative measurement and for the employment of business methods in business affairs. Such a situation suggests clearly the place and scope of commercial training in the upper grades or in high school for those who are in training for commercial vocations. The natural distribution of metals, fuels, clays, and other earth materials, the climatic and physiographic conditions which determine the location, amount, character, and availability of our flora and fauna, the factors which control transportation by land and water — these are problems in geography which become concrete and vital in the study of industries. The correlations are so obvious that only a stupid teacher can miss them. In nature study we shall find a real place for the elements of agriculture and forestry; no longer aimless meandering in

any scientific field, but definite attention to those occupations concerned with the production of materials good for food, clothing, and shelter, the conditions calculated to give best results, and the resistance which men meet in doing their work. The growing of any crop, even in a window garden, will epitomize the farmer's labors in tilling the soil, supplying plant food, utilizing light, heat, and air, overcoming disease and insect pests, and reaping his harvest. Every step takes on new meaning when the learner sees its place in the series of operations culminating in the commercial food supply of his own community, its sanitary regulation and domestic consumption. The elements of physiology and hygiene, and of physics and chemistry, are also called into requisition; they are all indispensable in fixing values of industrial products and determining economy in technical operation. What makes for hygienic living is from the economic standpoint as well worth knowing as what mechanical appliance will most increase the output. A proper study of the industries, therefore, I contend, will bring about a unified and closely correlated course in the biological and physical sciences by way of supplying the information wanted by the child in adjusting himself to the real world.

Correlation between school subjects. — Perhaps some timorous soul will interpret my outline of the pedagogical relations between the sciences and the industries as a denial of any independence to arithmetic, nature study, and geography. Far from it. The scientific subjects have a function of their own in the curriculum, as do the humanities and the industries. The use of language and the arts of reading and writing in studying the indus-

tries, even the generous use of supplementary readings giving industrial information, does not preclude the study of literature in progressively systematic form. The course of study in every subject may have two aspects, one peculiar to itself by virtue of which we recognize it as a distinct subject, the other relative to other subjects which the child may be learning. In arithmetic, that which is peculiarly mathematical looks forward to the systematic development of the science of mathematics, and it is possible so to emphasize this aspect as to make the study almost exclusively formal. The natural sciences may be so taught as to have no direct bearing on the child's experience. My thought is that any subject worthy of a place in the school curriculum should be developed along systematic lines characteristic of the subject itself by means which function in the child's experience with other subjects of information. This is only another way of saying that whatever is learned should be applied in practice. Perhaps better said, it is the harmonious interaction of all subjects in the curriculum which gives zest to study, solidarity in the knowledge acquired, and efficiency in converting knowledge into power. The reason for this is that the learning process is a unity; the child's experience in gathering information from many sources is unified, and it is his own; his instincts, impulses, and all his activities belong to him alone, and however segregated the ultimate ends of his endeavor may be in the mind of his teacher, he weaves all his experiences into the fabric of his own life. Whether or no that fabric be technically correct depends upon the systematic ordering of his experiences; its serviceable-

ness for any particular purpose depends upon the materials which have entered into it.

Revising the school program. — One other important question awaits an answer. Will the plan I have proposed tend to simplify the curriculum? My answer is that at least four subjects will be combined into one, and in some elementary schools one teacher will take the place of four. Manual training, fine arts, domestic art, and domestic science will drop out below the seventh grade, and in their place we shall have the one subject of industrial arts, the elements of industries. The term "manual training," if used at all, will cover the forms of motor expression employed in teaching reading, writing and drawing, as well as the manual exercises used in agriculture or weaving or pottery making or carpentry. There will be no hours set apart in the school program for work *exclusively* with the hands, and teachers will not be expected to provide manual occupations for every minute of the time assigned to any subject. When manual work is needed it will be demanded as insistently and employed as successfully in the humanities and the sciences as in the industries. In the lower school, manual exercises will be used as a means of self-expression, a method of teaching rather than a subject of instruction or a way of acquiring technical skill. That is, cooking in the lower school enables the child to know what happens when heat is applied to foods, and in what respects foods thereby are made more serviceable; cooking as an art in which a girl should excel belongs to a later period when she is fitting herself for housekeeping. Technical skill is a distinct aim in vocational training, but in the

earlier years of school the purpose is general rather than specific, cultural rather than vocational.

Development of the creative instinct. — In all industrial processes, wherever man transforms materials into things of greater value, he employs a technic peculiar to the situation, and gives to the product a touch which pleases his æsthetic sense. Earthen bowls might be made, I suppose, without appreciable artistic merit, but the fact is, that the crudest pottery shows an effort to attain some ideal standard. This striving for artistic effect is as instinctive in childhood as in primitive man, and no worker ever loses it until he loses all pride in his handiwork. It is the source of every fine art. It is self-expression, which is at its best when bodied forth in doing things worth doing well. The teacher of art, therefore, finds his best opportunity in that field which offers greatest inducement to constructive design. The art training which belongs in the elementary school is that training which makes for a better appreciation of æsthetic standards and which finds expression in making things more pleasing than they otherwise would be. It adds no burden to the curriculum; on the contrary, it enlivens it and makes its tasks more pleasurable because more gratifying to personal wants.

Revitalizing school subjects. — A systematic course in the industries will have the additional advantage of making it easier to teach everything else in the curriculum. Not only will the study of industrial processes give rise to concrete problems in mathematics and the natural sciences, but the practical character of such problems will incite children to find the surest and most

businesslike way of solving them. Time will be saved for drill in every other line. With fewer subjects and more practical problems, I should confidently expect better results in the three R's and a more thorough discipline resulting from work in every subject. There would be no attempt to cover the whole field of human effort; the standard set in the study of industries whereby only the essential processes should be included in the course would react upon the courses of study in the humanities and the sciences. Let it be agreed that only fundamentals have a place in the elementary curriculum, and it will be comparatively easy to insist upon thorough work. Under such conditions there can be no excuse for not getting it. Those who believe, as I do, in the educational value of work well done, will join hands right here with those who advocate a curriculum which imposes tasks worth doing well.

Education for equality. — My conclusion is that industrial education is essential to the social and political well-being of a democracy. It is the privilege of all, rather than the duty of a few, to be informed on matters affecting the social welfare of the body politic. A knowledge of how men get a living, the nature of their work, and the value of it, is a prerequisite to intelligent appreciation of the dignity of labor. A sympathetic understanding of the conditions underlying industrial competition will make for civil order and social stability. Training for citizenship may not safely disregard the dominant interests of the great majority of citizens. The public school must teach that which all should know. If only six years can be had for this work, the work must be done

in six years. There is no alternative. It must be done in such a way, too, that children will grasp its significance and carry its impressions throughout their lives. It must establish such habits of thought and conduct that all subsequent work will be aided by the discipline. This is the ideal of the elementary school. Joined with the humanities and the sciences, a study of the industries rounds out the education of the citizen and equips him to begin his vocational training. On the threshold of active life it puts him on a par with his fellows. It assures him that kind of equality which is the opportunity of every American.

CHAPTER VII

PROFESSIONAL FACTORS IN THE TRAINING OF THE HIGH-SCHOOL TEACHER [1]

MY purpose in this chapter is to discuss what may be properly considered professional in the training of the high-school teacher, as distinguished from the academic or cultural. What constitutes professional training? What light is shed on this problem by the example of other learned professions?

Ethical relationships between mankind. — The economic law of supply and demand determines the vocations of most men as it controls the products of their labor. In some vocations, however, another factor comes into play. The rights of others in mind, body, and estate have to be reckoned with. In most occupations these human rights are implicit; they are cared for in the common law. But in others they are guarded specifically by statute. Not everyone who has the opportunity and inclination may practice law or medicine. By the law of the State, those who are pledged to see justice done between man and man, those who by the nature of their calling are in a position to imperil the health or lives of their fellows, those upon whom the public depends for protection, or who belong to the civil service, are licensed to pursue their vocations. Putting aside those vocations which are licensed for revenue only, it appears that

[1] A revised reprint from the EDUCATIONAL REVIEW, March, 1913, used by courtesy of the publishers.

when the State interferes between the practitioner and the public, there is an ethical principle at stake. The well-being of the many must not be sacrificed to the ambition or the cupidity of the few.

The pursuit of ethical ideals was once the chief characteristic of the learned professions. Witness the moral code contained in the Hippocratic oath which has been the gateway to the profession of medicine for two thousand years. Think of the vows taken by the candidate for the priesthood, and of the pledges exacted upon admission to the bar. The modern State but reënacts the professional decalogue when it insists upon proper evidence of moral character in licensing the lawyers, physicians, and teachers. Some day the principle will be extended to embrace all vocations which touch on the ethical relations of man and man.

Cardinal principles of professional service. — The first qualification for professional service, therefore, is good character — the living embodiment of moral standards, the conscious striving for high ideals. The professional worker looks to the future and is pledged by his vocation to make the future better than the present. Such an aim implies in these days the possession of two other qualifications, each potent and indispensable. One of these is specialized knowledge, and the other is skill. These three — an ethical aim, specialized knowledge, and technical skill — are the trinity upon which professional service rests. The stonecutter may have superior skill, but with only a modicum of specialized knowledge and lacking an ethical aim, he remains the artisan; the physician who is ignorant of his subject, however high his aim or

however skillful in practice, is still a quack; if he is learned in high degree but lacks professional skill, he is a confirmed bungler; the lawyer who is versed in all the subtilities of the law and adroit in legal procedure, but who disregards the ethics of his profession, is a charlatan, despised of men.

The teacher may be a professional worker. But he who puts himself in the professional class must know accurately what he is to do, have the requisite skill for doing it, and do his work under the guidance of high ethical principles. The teacher who is ignorant of his subject is a quack; the teacher who lacks professional skill is a bungler; the teacher who is not inspired by high ideals is a charlatan.

The road the masters have trod. — My idea of professional training is that it is a process of giving to novices what the masters have acquired. It is helping the beginner to get what he might get for himself under favorable conditions. There is nothing in the training of a teacher in a professional school, for example, that differs from the training of any teacher anywhere, except that the good professional school affords opportunities, equipment, and guidance that few teachers can get elsewhere. The professional school for teachers, like the professional schools of law, medicine, and engineering, is intended to help the novice travel the road that every great master has traveled, but to do it more quickly, economically, and confidently than he otherwise could.

Focusing educational effort. — In my discussion of the professional training of the high-school teacher, I appeal directly to the experience of the best teachers before me and to the best in each one of my readers. What is the

process by which you have made yourselves masters? Recalling your own experiences, what would you do if you had a fair field and all possible favors? How would you attain your standards of excellence in the three cardinal principles of professional service?

First, specialized knowledge. — It is generally taken for granted that the college graduate knows enough to teach in a high school; in some localities graduation from a normal school, or even from a secondary school, is considered sufficient evidence of ability to do high-school work. I wish to go on record as one who believes that graduation from a college is no evidence whatever of ability to teach anything. So far as the college is a college and not a professional school, its business is not the training of the teacher or of any other professional worker. The college aims to give that general knowledge which should lie at the foundation of every kind of professional superstructure. What the profession demands is specialized knowledge, the mastery of some small field in its relations to other fields of knowledge. But knowledge specialized for the sake of professional service is not isolated information. It is rather the product of broad scholarship focused upon a particular subject.

Right here is where many excellent persons, chiefly some of our ancient classicists and modern scientists, make a grave mistake. They argue that the chief end of scholarly study is the mental discipline that it affords, or the pursuit of truth for its own sake, rather than the understanding of the subject in its cultural setting. Isolated knowledge may be useful in certain technical lines, but knowledge teeming with human interests and specialized

along cultural lines is indispensable in professional service.

A need for an intellectual perspective. — It follows, therefore, that there must be a general preparation for the beginning of professional study. Call it what you please — intellectual perspective, cultural setting, liberal education — it is something which gives breadth of view and that largeness of life which form the very foundation of every kind of professional service. It is precisely this training for which the college stands. I do not pretend that every college graduate has it, or that there is no other way of getting a liberal education; nor do I claim that a college degree should be the stepping-stone to every learned profession. But I do claim that the intending high-school teacher needs a course of general training the equivalent of the best given in any college in the land, and needs it, too, as a prerequisite to the technical studies of his profession.

A plea for sane scholarship. — The professional training of the teacher properly begins with the process of narrowing the field or of intensifying work in some part of it, or, to use a better figure, of focusing what one knows on the problem in hand. It is more than mere specialization in the subject. For example, a teacher once came to me from the wilds of New York state, a region barbaric only in an educational way, however, saying that he wanted to fit himself in a six-weeks' summer session to teach Latin. My first question was, "How much Latin do you know?" Because my business is the training of teachers I have become hardened to the pitiful exhibition of ignorance so often displayed by those who want to teach, but I was not prepared for the answer to my question in

this particular instance. "I don't know any Latin," he said; "that is what I have come here for." "But how do you expect to get ready to teach Latin in six weeks?" "Well," he replied, "I don't have to begin till September and all I have to do next year is to teach Latin lessons and Cæsar; I guess I can do that." A little further probing disclosed the fact that the candidate was a high-school teacher in good standing, legally certified to do what he proposed, had the sanction of his principal and school board for the step, and was actually engaged to teach, two months hence, a subject which he had never studied in his life. It is a striking commentary on the situation to say he was more surprised than I had been when I told him that he had come to the wrong place. His last word to me was, "Why, I thought Teachers College was a school for the training of teachers."

Actual fact as this tale is, it sounds enough like a parable to furnish me a moral for to-day's sermon. Suppose this teacher did get what he wanted and after two months of cramming actually began to teach Latin according to the Regents' syllabus. What kind of equipment did he have? I suppose one might say it was highly specialized and focused on his problem. But it is a fine example of what I have called *isolated* knowledge. It is not sound scholarship.

Now, take as an example the opposite extreme. Suppose a scholar in Latin, one who has made an exhaustive study of the Latin language, Roman history, archæology, literature, law — in short, one who appreciates the genius of Roman civilization and knows its bearing on modern life — suppose such a scholar were asked to teach Latin

lessons and Cæsar to high-school pupils, aged fourteen years, boys and girls, untamed Americans who idolize Christy Mathewson, and by parental ambition dedicated to the college. What chance has your scholar of getting ready for this job in six weeks? Safe to say that the teacher who starts with nothing in July will meet his class with more assurance in September than the scholar who has spent years in getting ready.

The building of a curriculum. — There is no possibility whatever of giving professional training to an ignoramus. The sculptor may be a stonecutter if he have the technical skill, but a stonecutter can never become the sculptor until he gets the vision of the angel in the unformed block of marble. The teacher whose knowledge of the subject is confined within the covers of two or three books — Somebody's Latin Lessons and Cæsar's *Commentaries*, Books I-IV, we will say — has no trouble in selecting what he will teach. No more has the stonecutter to do with determining his task when it is defined for him in a blue-print drawing. But the master, he who has command of himself and of his subject as well, must pick and choose at every step. Time is precious; opportunity will not wait. He must act, and his artistic eye is quick to condemn every slip that he makes.

Right here is the chance for the most helpful lessons in professional training. In the professional school for teachers we call it a course in the selection of materials and in the arrangement of these materials in a curriculum. The wider the range of scholarship, the more one knows of his subject, the greater is the need of wise selection and orderly arrangement of materials. One who is full

of his subject does not unload it all in one year or upon one class. What may safely be given out will ultimately be learned by any conscientious teacher, but he who has much to give is the one who learns most readily and is most appreciative of what the experienced guide can tell him.

Injecting vitality into the course of study. — We find in practice that even the best scholars among our college graduates are not ready for a technical course in the selection and arrangement of materials. Too often their training is scrappy. The elective system makes it easy to follow a favorite professor or to omit some essential part of a subject. I recall the case of a graduate of one of our best universities who had studied Latin four years in high school and four years in college, but who had never had a course at any time in Roman history, and who knew next to nothing of Roman life. It is not at all unusual to find college graduates who have had years of training in history made up of fragments called the Reformation, the Renaissance, the French Revolution, and the like, but with no real understanding of the sweep of modern history. A large part of the trouble with teaching the sciences is due to the fact that physics, chemistry, geography, physiography, meteorology, zoölogy, entomology, physiology, bacteriology, and the rest are taught as isolated units. Even in mathematics, the most clearly defined of all our high-school subjects, the college graduate comes to his work removed by just four years from the problem with which he has to deal. In all such cases the first step is to get back on high-school ground. The Latinist must read Cæsar, Cicero, and Vergil, not neces-

sarily stopping with four books of the Gallic War, or with the Catilinian orations, or with an abbreviated edition of the *Æneid*; he should learn to speak the language at least well enough to keep it from seeming dead; and he should inject himself far enough into Roman history to feel the glow of that Golden Age forever imperishable. Likewise the mathematician needs to know what arithmetic, algebra, geometry, and trigonometry stand for, what they are, what they mean in everyday life, and what they prepare for in the higher mathematics. It is perspective that is wanted in this subject, as in every other subject of the high school.

Intrinsic worths. — Only by knowing intimately what these subjects are worth in and of themselves, what their practical application is, and what they signify for later development, can we expect our teachers to put correct emphasis on what they teach. The ignorant teacher is prone to drive every nail home by the hardest kind of knocks; the scholarly teacher knows that time and strength are easily wasted on trivial topics, while too much attention can scarcely be given to important matters. What is important and what is relatively unimportant at any stage is well worth knowing. It is professional knowledge which may come from experience, but which thrives best when many minds, and all of them acute, are bent on solving a professional problem. This is one sufficient reason for the existence of the right kind of professional school for teachers. The school which does not make it a corner stone has no excuse for being.

The complement of knowledge — practice. — The next factor in professional training is technical skill. Im-

portant as this is in equipment of a teacher, or of any professional worker, no one will claim, I fancy, that any considerable amount of it can be acquired in a professional school. The young physician does get some chance to try his hand in hospital practice, but nowadays the prospective lawyer and engineer are still novices on entering their life work. Some direction along practical lines, it is generally admitted, should accompany the theoretical training of the professional course, but for many years there has been a steady decrease in the time given to practical work in all our professional schools. In some quarters, in medicine for example, there are signs of renewed emphasis upon the practical side, but in the large I think it may be safely said that modern professional training is chiefly concerned with imparting scientific knowledge. The ideal union of theory and practice is conspicuous for the absence of practice.

Be this as it may, it will also be conceded that to the extent to which the young practitioner is obliged to work independently from the beginning is it necessary to equip him with the skill requisite to do his work acceptably. The young physician, to a greater degree than the young lawyer or engineer, is obliged to work alone; hence the demand for practical training in the hospital. So with the teacher. He is obliged to do his work, under supervision, to be sure, and along a prescribed course, but still to a large extent independently. The call is for teachers of experience, and the experience gained by practice teaching is always considered better than none at all. We need more of it in our training schools, rather than less.

Individual differences. — It is important, however, that we keep in mind a fundamental distinction in the quality of work that may enter into a teacher's equipment. That which is suited to one type of mind may be out of place with another. For example, when we wish to give technical skill to an artisan's apprentice we see to it that he knows what he is to do, that he is shown how to do it, and that he repeats the operation often enough to make it automatic. The best results come from long practice without break or variation. The artist, on the other hand, encourages initiative and invites variety of treatment. The gulf fixed between the two in this respect is one of intellectual ability. The lower the grade of intelligence, the more nearly the training approximates that employed in breaking animals; the higher the grade of intelligence, the better the understanding of what is to be done and of the means to accomplish the purpose. The person of high intelligence is, or may be, self-directive.

The real problem of the training school for teachers with respect to technical skill is in the differentiation of types according to intellectual and professional acumen. It seems obvious to me that the kind and extent of practical work appropriate to the needs of the normal school may not be best adapted to the training of high-school or college teachers. It may well happen that the rural teacher who enters a normal school at the age of eighteen will require an apprentice training strictly analogous to the training given the carpenter or the plumber, while the university graduate at twenty-five may safely be left to his own devices in directing a seminar course. In the latter case the important thing is that the teacher knows

his subject, appreciates what he is to do, and has a lively sense of his personal responsibility in getting the work done. Success depends primarily upon the combination of knowledge and understanding guided by high ethical ideals. The man of power will find his way even in the classroom; the worth of his work will be measured by his ethical standards.

The high-school teacher stands midway between these extremes. He is not overly intelligent but he is generally not an ignoramus. He needs practice under guidance, and most of all he needs practice in self-criticism and self-direction.

A need for an ethical attitude. — This leads directly to my third point — the ethical aim of instruction. Efficiency in work presupposes that the worker have a clear conception of what he is working for. If the work be merely hewing to a line, the line must stand out and the worker must know what it means. If it means merely a boundary beyond which he dare not go, we put the laborer on a low plane; if he sees in it the expression of a scientific calculation of the strength of material, or if he regards it as a unit in some artistic creation — above all, if he has himself drawn the line and knows that it belongs scientifically or artistically just where he has put it, we place the worker unhesitatingly in the professional class. The essence of professional service is found in the ethical attitude of the worker. All else is subsidiary, however essential it may be to the work in hand. In the case of the teacher, the knowledge of the subject which he teaches is the instrument which he uses more or less skillfully in the accomplishment of his purpose. His purpose

is to educate by means of the formal studies of the curriculum and the discipline of the school used in such way as to produce the results desired.

Developing a professional consciousness. — The chief criticism of the high school is that it doesn't know what it is doing. Teachers are deluded into thinking that they are teaching Latin, or history, or mathematics, when they are really giving instruction in fragmentary and unrelated parts of a subject. A high-school principal once told me that he has teachers of arithmetic and algebra and geometry but no teacher of mathematics. Furthermore, it rarely happens that even our best teachers of the mathematical subjects know the commonest applications of mathematics in industrial and commercial life. Few secondary teachers have any real grasp of the subjects of the curriculum, and fewer still seem to know that any subject other than their own has any excuse for being. In a word, teamwork is conspicuously absent from our high schools.

This situation is due partly to lack of academic training, but largely to lack of interest in the professional aspects of school subjects and the school curriculum. Possibly the comprehensive examination will correct the academic deficiencies, but the evolution of a suitable curriculum and the making of character by means of scholarly instruction and moral suasion depend upon professional insight. Some teachers seem to have intuitive knowledge of this kind, but the best learn something from experience. It is the function of professional training to bring this knowledge to consciousness and to put even the dullest teacher in the way of appreciating what the best teacher may do instinctively, and to enable

the most favored to acquire mastery more surely and expeditiously than he otherwise could.

It is not my intention to weary my readers by a discussion of the meaning of education or of the function of education in a democracy. It suffices here to enumerate the methods of securing such an understanding on the part of young teachers and to point out a rough-and-ready way of testing the efficiency of teaching.

Aids to instruction. — Teaching is no new art. There were teachers worthy of the name before books were invented or football was made a university discipline. Schools and school systems played their part before ours were thought of. The more one studies the history and principles of education, the less one is inclined to disagree with the preacher who declared that there is no new thing under the sun. The teacher who thinks his problems peculiar to himself and to his pupils will find light and inspiration in the historical accounts of the work of other teachers in other times. As a check on provincial notions of educational aims and values I commend a comparative study of the educational methods and school administration of the leading European countries. As a guide to schoolroom practice we are just beginning to appreciate the value of modern educational psychology. It opens up a new world to the beginner and forces him to self-criticism. It helps him to understand the learning process and makes him conscious of the way children think and acquire their habits. From physiology and hygiene we can get light on the physical well-being of our pupils. It were easy to dwell at length on the possibilities of such studies, all of which should have some

part in the curriculum of a professional school for teachers, but I prefer to conclude my argument with a statement of one phase of the general subject. It is, however, only one phase of many which might be treated at length. I select it as a sample because it has special value in secondary education.

The obligation of American schools. — What is the essential character of education in a democracy and how may we judge its efficiency? What obligations are imposed upon the American public school by virtue of the fact that it is American and public?

It is apparent that there can be no great difference in opinion regarding the desirability of those virtues which make for character. In respect to most of these we are one with the educators of other civilized countries, past and present. Our ideals of scholarship and discipline and of vocational efficiency may outrun our practice, but they are not essentially different from those which obtain elsewhere. I say nothing of the right of anyone to seek another type of education, or of the preference which anyone may express for the private institution or for individual training. I have now no quarrel with those who think that art can be taught for art's sake, or mathematics for the sake of mathematics. What I do insist on is that the American public school, supported by public taxation, is under obligation to train American citizens, men and women able and willing to coöperate with their fellows in the attainment of American ideals.

A new social order. — Our mode of government is not our only, or even our chief, point of difference from other countries. It seems to me from the educational stand-

point that the crux of the matter is to be found in our social order. American life is not regulated by tradition of class or caste; we have no controlling institutions of church or guild; there is no social standard which is authoritatively binding on any American youth. As yet the way is open to talent and ability all along the line. Our only controlling institution, if such it may be regarded, is our school system — a self-imposed and self-directed organ of our democracy.

Whatever else the typical American is or may be, he is alert, progressive, and independent. We expect him to be capable of directing his personal affairs, of keeping abreast of the times, of initiating reforms, and passing judgment on his own acts and those of his fellows. Periodically we ask him to pass upon questions of national policy and of international importance. Theoretically the American voter is a sovereign in his own right. I am well aware that the picture is easily overdrawn and that the American voter is less than he should be, but if the American citizen were what he should be, we should spell "Voter" with a capital letter.

The fact is that we do look for intelligent self-direction in every act of life. The farmer looks for it in his laborers; the business man expects it in his clerks; the corporations want it in their employees; we need it in the professions, and count it a failure when we fail to get it. We have no other criterion so universal and so reliable by which to judge of efficiency in American life.

Schooling for intelligent self-direction. — Suppose we apply it to our schools and school work. What is a good school in a system of schools? Surely one that knows

what part it plays in the total scheme and is capable of playing that part in an intelligent manner. What is good school administration? Surely that kind of control which permits and encourages intelligent self-direction in all parts of the system. And yet how often do we see school systems governed by autocratic dictum in which the component parts are permitted no shadow of initiative and denied all chance of self-direction. Such a system belongs under a paternal government in which laws and orders take the place of democratic freedom. What is good discipline in a school or classroom? Is it the kind that is begotten of fear and imposed by authority? I have heard principals and teachers read out on the opening days of school a list of penalties for infractions of the law, but I have never been persuaded that laws unsupported by public opinion are any more successful in school than outside. The lockstep and monitorial system no more belong by right in American schools than they belong in the American home, or in public meetings, or in business. The best discipline is that which secures the greatest freedom to the individual consistent with the rights of his fellows. The trained observer can tell at a glance whether a class is held in order by superimposed authority or is orderly because all want to do some task. It is an impressive and reassuring sight to see, as I did recently, fifteen hundred high-school pupils walk leisurely from their classrooms to the assembly hall, find their places without confusion, and instantly stop their conversation when the clock indicated the hour for the exercises to begin. Herein is self-control worthy of American citizenship. To say to one, come, and he cometh, and to another

go, and he goeth, may be an ideal of military discipline and it may occasionally be necessary in home and school, but the ideal of discipline in American schools will not be reached until such commands are unnecessary to secure obedience and effective coöperation.

The tests of instructional efficiency. — The same test may be applied to teaching. Does it make for intelligent self-direction? First consider the prevailing method of assigning home tasks. How often the order is to solve the next twenty problems, to translate the next fifty lines, or to read the next ten pages, with no instruction on the method of approach, not even a hint as to the purpose of the task or its connection with what has gone before. The result we are all familiar with. Blind guessing at the answer, cut-and-try methods of solution, time wasted in thumbing a lexicon, illegitimate assistance sought from parents or fellow pupils — almost everything except straightforward learning. From such a method, when persistently used, we have no right to expect anything but bad intellectual habits. Moreover, I am persuaded that it ultimately leads to moral degeneracy, because the prize goes generally to the most dishonest player. The only corrective that I know of is to assign tasks that can be done without assistance and to see to it that they are worked logically step by step from data already in the possession of the pupil. The ability to tackle a problem courageously, to analyze its component parts, and to work through it logically, is of vastly more account in school and in later life than the art of guessing at the result, however brilliantly the guessing may be done. We need to put greater emphasis on how pupils learn and less

on what results they get. If they are trained to be intelligently self-directive there need be no fear of the results.

The functioning of knowledge. — Next consider classroom practice. At its worst it may be merely hearing recitations or a demonstration of guesswork with blackboard accompaniment. It were a euphemism to label such efforts teaching or instruction. It may be something better, however, and still not merit approbation. For example, much of the best teaching we find in our schools and colleges contents itself with imparting information. Pupils may seem interested and stow away fact upon fact against the duty of examination. The final test may be satisfactory, measured in percentage of correct answers. Nevertheless such work may be wholly deceptive. What is learned may be useless because it is isolated, or untrustworthy because it is improperly related in the experience of the individual. The old-time books on arithmetic had a chapter on Alligation which some of us learned to perfection. It was isolated knowledge then, and has remained imperfectly related to the experience of all of us whose business is other than the blending of liquors. The only benefit derived from that chapter was practice in computation, which might have been gained from any other arithmetical task. Memorizing of facts or processes is of little value, even though an examination shows that they are accurately and tenaciously kept in mind, unless such facts and processes can be used by the learner. So much time and energy are wasted in this way that one pities teachers who fail to see the good they might do. Just a little intelligent self-

direction would lead them to take the next step. It is highly important that fundamentals be accurately learned. The alphabet, multiplication table, declensions, paradigms, and the like, must be memorized, but the good teacher does not stop there or with any number of similar tasks. He uses them in all possible combinations and permutations. He counts them means or instruments for a higher purpose. One reliable test of success is found in the widening intellectual horizon of his pupils; another is in their ability to use what they have in the acquisition of new knowledge. When a pupil learns to direct himself intelligently in interpreting the facts of his own experience and in enlarging that experience by gaining new knowledge, he is on the highroad to a liberal education.

Training competent leaders. — I have dwelt at some length on what I consider the chief essential of good teaching because we see so little of it in our high schools, notwithstanding the fact that it is a characteristic of training for leadership in all kinds of schools the world over. If we are to get competent leaders we must train them to be intelligently self-directive. The secondary school exists for the purpose of selecting and training, so far as it goes, those who must bear the responsibility that attaches to the enjoyment of superior advantages. Historically, the secondary school exists for this purpose and to this end it is supported in America at public expense.

The teaching personnel. — Now that I have had my say, or tried to say what I had in mind, I realize that I have said little on the training of high-school teachers.

But I confess to little interest in the routine training of secondary teachers or of any other teachers, if by that is meant courses of instruction in formal pedagogy or predigested pedagogic methods. As I look at it, there are many ways of getting educational results. Your way may not be my way and your pupils may differ from mine in ability, in accomplishment, and in aim. So long as teachers differ and pupils differ there can be no invariable method. That is best which is best adapted to the occasion, all factors considered. My interest centers in ways and means of getting teachers who are liberally educated, who know their subjects and have the high ambition to train their pupils for leadership in a social order that demands intelligent self-direction. I have no patience with those who pretend to esoteric wisdom by virtue of their office or their training. By their fruits ye shall know them. The good teacher is not a pedant, a pedagogue, or an egotist. He labors that others may enter into the fruits of his labor. Unless it be guided by this ethical ideal, professional training is useless and worse than useless.

Instruction as a fine art. — One other feature of secondary education deserves more than passing mention, but in addressing high-school teachers it were superfluous to dwell upon it. I refer to school management, the act of making a school a good place to live in. It is something acquired by all good teachers, but, like skill in teaching, it can hardly be taught to those who most need it. The satisfaction that comes from giving instruction, however artistically the work may be done, does not compare with the joy of living with adolescents when one has

the ability to control adolescent emotion and to direct adolescent will. That is the superlatively fine art of teaching, the birthright of a few, the despair of the many. Nevertheless, few schools can boast of having many geniuses on their staffs, and in some way the average teacher must be trained to realize the responsibility of his position. School organizations of many kinds — for social intercourse, mutual benefit, recreation, athletics — springing up over night must be directed aright or they will surely go wrong. Each boy is a problem, each girl an enigma, and yet the well-being of the school demands instinctive, prompt, sympathetic, effective action on the part of those who stand *in loco parentis*. I mention this, not because our high-school teachers are ignorant of their duties or neglectful of their opportunities — in my experience they are prodigal to a fault of their time and energy when their pupils are in need of personal guidance — but because I want to suggest a way of measuring the efficiency of their action. I would apply the same test that I use in other forms of school work. Is the fraternal society intelligently self-directive? Can the debating club single out a worthy topic for discussion, attack it logically, reach sane conclusions and maintain self-control in doing it? Does the athletic team stand on its own feet, fight its own battles, and win its prizes as men do who struggle honestly for the prizes in business? Is the boy who needs correction encouraged to face his problem rationally and work out his own salvation, or is he told what to do and commanded to do it, or worse still, is he made a dependent upon some stronger personality? These are questions which every

teacher, he who is born as well as he who is made, may profitably put to himself. The professional school may help him find his way, but only experience under wise guidance will bring the answer.

Proficiency standards in training. — I have a word to say to the college professor and the school superintendent. The training of high-school teachers is a work in which they are both vitally interested and in which they should take a part. Unfortunately, neither has as yet seen fit to recognize the obligation. The college teacher is prone to give his recommendation as soon as the student has acquired a smattering of his subject. Colleges should know better than to turn loose the average graduate on unoffending children. The college department of mathematics does not consider its graduates engineers, or the department of physiology its graduates physicians. Why should they think the college student of Latin a fit teacher of Latin? And how does the superintendent of schools justify himself in putting the novice in teaching, even a graduate of our best professional schools, in independent charge of a class? When it is known that so much of our academic training is faulty and that professional training at best is only a preparation for service, how is it that no provision is made for a period of probationary teaching under competent guidance? I venture to say that if our colleges should treat the profession of teaching as they do other professions, and if our school system should provide adequate apprentice training, we should have no excuse to spend a session in discussing the theme of this afternoon. The main reason why we talk so much on this subject and say so little is that the two dominant

influences in shaping the preparation of teachers are in league to hinder progress. Let the colleges refuse to sanction poor teaching and let the schools make it possible for a teacher to perfect his art, and we shall soon have teachers who can do professional work. Until that time we shall waste our breath in talking, and the craftsmen in our schools will head straight for trade-unionism. If that is what you want you will surely get it without effort. But that is not what you want; you want something better. The time is ripe for a change. The public is dissatisfied with what is being done. Greater efficiency is the watchword of the hour, and with greater efficiency go better remuneration and more certain professional standing. It is the high privilege of some of us to help make a few teachers more worthy of their positions. We need coöperation in a task which combines in highest degree professional service with patriotic duty.

The trinity of professional service. — In summary, I repeat that the professional training of the high-school teacher follows a course of general training which should give sound scholarship and breadth of view characteristic of the culture such as may be best acquired in a good college course. The distinctive professional factors in a teacher's training are (1) specialized knowledge of the subjects to be taught, including their relations to other subjects of the curriculum and their applications to everyday life, (2) technical skill in teaching, and (3) the ethical aim of education. The perfection of the teacher's equipment along all these lines is a life work, but the professional school may make a beginning by putting the novice in the way of understanding what others have done and

are doing, and by making him self-critical and self-directive with respect to his own work The greatest need to-day in the development of professional training for high-school teachers is the coöperation of the colleges and the schools — of the colleges by way of making suitable preparation for professional study, and of the schools by way of providing adequate means for giving apprentice training under competent guidance.

CHAPTER VIII

SPECIALISM IN EDUCATION[1]

THE finest portrait of the general practitioner, drawn in our time, is that of the Scotch doctor in *Beside the Bonnie Brier Bush*.[2] "There were no specialists in Drumtochty, so this man had to do everything as best he could, and as quickly. He was chest doctor, and doctor for every other organ as well; he was accoucheur and surgeon; he was oculist and aurist; he was dentist and chloroformist, besides being chemist and druggist." For fifty years he rode up and down the glen, in fair weather and foul, through snowdrifts and flooded fords, to bring consolation and health to the sick and suffering in his district. His presence inspired confidence—"the verra look o' him wes victory"; "a blister for the ootside an' Epsom salts for the inside dis his wark, an' they say there's no an herb on the hills he disna ken."

But when the life of Annie Mitchell, Tammas' wife, was ebbing slowly away, Dr. MacLure reached the limit of his skill. Then one hour's work of the city specialist brought relief to the distracted husband and joy to every heart in the glen. No one rejoiced, however, more than the old doctor who saw himself eclipsed; while the great specialist learned enough in his short visit to enable him

[1] A revised reprint from the AMERICAN SCHOOLMASTER, September, 1913, used by courtesy of the publishers.

[2] These extracts from Ian Maclaren's *Beside the Bonnie Brier Bush* are used by special arrangement with the publishers, Dodd, Mead and Company, Inc.

to measure the country physician at his true worth. At the parting the Queen's physician turned to the old doctor, rough, gaunt, ill-clothed, scarred by many an accident and bowed by the weight of years, — "Give's another shake of the hand, MacLure; I'm proud to have met you; you are an honor to our profession."

In another chapter of the same book, a book, by the way, that is fit to rank with the best educational classics, is a sketch of a great teacher, a general practitioner who is also an honor to his profession. "He could detect a scholar in the egg, and prophesied Latinity from a boy that seemed fit only to be a cowherd. . . . He had a leaning to classics and the professions, but Domsie was catholic in his recognition of 'pairts'. . . . " But it was Latin Domsie hunted for as for fine gold, and when he found the smack of it in a lad he rejoiced openly. He counted it a day in his life when he knew certainly that he had hit on another scholar." His triumph came when George Howe, one of his own lads of "pairts," carried off the medal from the university in both humanity and Greek.

A life of professional service. — The sketch puts master and pupil in the foreground. Apparatus and equipment, even books and schoolhouse, are barely mentioned. "Perhaps one ought to have been ashamed of that schoolhouse, but yet it had its own distinction, for scholars were born there, and now and then to this day some famous man will come and stand in the deserted playground for a space." And well he may, for the place is hallowed by the associations of a life of devoted service — a service that is professional in highest degree. Fortunate,

thrice fortunate, is the man who can find in some classroom, long since deserted or now echoing to the sound of strangers' voices, inducement to meditation and cause for thankfulness. And thrice fortunate the teacher whose memory compels man to bless him.

The vogue of specialization. — One hears it said nowadays that the general practitioner is passing, that the age of specialism has succeeded the happy time when everyone knew everything and could do everything that was to be done. To a certain extent it may be true, but it is not the whole truth. True it is that the specialist flourishes in these times like a green bay tree. He is recognized by the mighty and lauded by all the world. And by the acid test, I mean by the size of the fees he charges, one knows surely that the specialist has come into his own. If one wants a mountain tunneled, a river bridged, or the east and the west joined by a canal, the specialist can be found to do it; if one wants a seedless orange, drought-resisting alfalfa, or a new breed of corn, the specialist can be found to produce it; if one wants to rid a city of yellow fever, find a serum for diphtheria, or fit up a partially furnished human body with organs discarded by their former owners, the specialist can be found to do it. Moreover, when we want to find a cure for cancer, to walk with seven-leagued boots, or to communicate with Mars, we have faith that some day the specialist will be found who can do it. We have reached the stage of evolution when nothing seems incomprehensible or unattainable.

A connecting link. — But however overwhelming the vogue of the specialist, the days of the general practitioner have not passed and they will not pass. Just in propor-

tion as the specialist withdraws himself from everyday contact with men and affairs, just to that extent is it necessary to have mediators between him and those through whom he works or for whom his work is done. The man who designs the bridge, lays out the tunnel, or conceives the canal depends for his success on the foreman and workers on the job. The specialist in horticulture or agronomy may discover the new type, but it is the gardener or the farmer who brings the type to fruition. The specialist in medicine or surgery finds a new way of controlling disease, but it is the family doctor who brings it to our homes or goes with us to the hospital when our need outruns his skill. The general practitioner is the connecting link between those who can give and those who wish to receive.

Placing the emphasis. — The strength of the specialist is in what he knows and can do; his weakness is in his narrowness and lack of experience with the forces and influences outside his own sphere. The strength of the general practitioner is in his knowledge of the world and of human nature; his weakness lies in his inability to be expert in everything at once. The distinction, as I see it, is mainly a matter of emphasis, having to do on the one hand with the extent of one's work and on the other hand with one's attitude towards it. Everybody may be a specialist in something and a general practitioner in many other things at the same time. Whatever contradiction exists is due to the contest between high efficiency within narrow limits and general ability in a larger field.

Specialization in education. — In the field of education we are coming to recognize the existence of specialists.

Formerly the country teacher was a country teacher; the grade teacher a grade teacher; the high-school teacher a high-school teacher. Even the college professor enjoyed the distinction of belonging to a type of his own. But how rapidly is all this changing. The rural teacher is now expected to be expert in agriculture or the household arts or in both of them, and in rural economy besides. The grade teacher is coming to be known as a primary teacher, or a grammar-school teacher, if, happily, she escapes being labeled by the exact number of the grade to which she is consigned. In the secondary field we no longer have the general practitioner, except in schools too poor to afford the specialist in English, or Latin, or mathematics. The teacher of science has given way to the specialist in physics or chemistry or biology. Nature study is breaking up into bits in places where nature is viewed in fragments. The college professor has been inoculated with the Ph.D. virus and has come out of it pockmarked with the German university. In fact, we no longer have colleges of the old type, but instead we have hybrid institutions — part school, part university. And the end is not yet. Experts, real or fancied, are springing up everywhere. Experts in supervision and administration, experts in school surveys, experts in accounting, experts in child study, experts in farm demonstration, experts in corn clubs and tomato clubs, experts in everything that anybody wants and for which a comfortable salary is forthcoming.

It were easy to poke fun at the popular craze for specialization in education, but the situation is far too serious to warrant ridicule or justify levity at the expense

of either the budding specialist or the educational reformer. Within the past ten years we have seen an almost complete revolution in public opinion with respect to public education. Few of us are so young as not to recall the time when it was professionally dangerous to advocate vocational training, but to-day it is a sure mark of the old fogy to oppose it. The grip of this new idea on the public mind is clearly shown in the enormous sums of money now annually voted for public funds for the promotion of the practical arts of agriculture, industry, commerce and home-making. And in true American fashion millions of money are being poured out for these purposes before schools have been established or teachers trained for the work; or even before it is surely known that children can be found to accept the new kind of schooling. What matters it, so the public seems to think, whether the money be wisely spent; we want results, and it is the business of schools and teachers to give us what we want.

Needs in special fields. — The seriousness of the situation lies in the fact that we have at present neither the teachers nor the means of getting the teachers to do this work. For fifty years we have been building up a system of normal schools for the training of teachers who may be called general practitioners in elementary and secondary education. Now, of a sudden, the call comes for specialists of infinite variety — teachers of carpentry and cabinetmaking, of lithography and printing, of blacksmithing and molding and founding, of machine work and tool cutting, of house decoration and furniture design, of agriculture and farm demonstration, of garden-

ing and horticulture, of cooking, dressmaking, millinery and laundering, of music and the fine arts, of physical training and nursing — only to mention a few of the special demands made upon me within a few months. It is impossible to satisfy these demands. All of the normal schools, departments of education, and special training schools in this country together cannot meet the needs of a single state. The city of New York alone needs to-day more competent teachers in these special fields than all of the training schools of the United States will turn out in the next few years.

What will the harvest be? Why, surely this: The city of New York, the state of Michigan, and all the other states will put teachers to work who will not know their business, but who will draw salaries and hold their jobs till a merciful Providence disposes of some by death or old age and fills their places with better material. Meantime our training schools must struggle on with inadequate support, trying to make bricks without straw. We know, however, from past experience, that the only way to get more straw is to turn out our tale of bricks, each one better than the last.

A foundation for citizenship. — This latest innovation in public education has come to stay. Make no mistake on that score. It is not a passing fancy. It has its roots deep down in the economic consciousness of our people. It is a phase of the struggle for existence. Our population is increasing; our natural resources and our unimproved land remain fixed or tend to diminish. Two must some day live where one lives now, and then three and four. Men live together peaceably when all are well fed, but

let some hunger for food and you have trouble. A few go hungry now; more will be hungry next year and the next. Then look out for more trouble. The present trend in education has regard for the time when the man who is inefficient will be a disturber of the peace, and the demand for a new type of education is the groping of the public mind for a solution of this great economic problem. It cannot be explained away; it ought not to be disregarded by those who see in education something more than finger play and the acquisition of skill. Indeed, the time is coming when those who cherish the highest ideals of education will find the ground swept from under their feet, unless they realize that in order to make life worth living men must be taught to live decently. The man who can do something well will surely take pride in his work, as well as get a decent living from it. Pride in one's work and the ability to gain a competence from it — these are the foundation upon which conservative citizenship rests. These are the ends towards which vocational training strives.

Trends toward specialization. — The tendency to specialization has been strongly marked in our national life for more than fifty years. It has developed in response to the demand for more efficient service. First felt in the field of the mechanical and industrial arts, Morrill land grants stimulated the movement during the time of national peril in the sixties, and from that time to this there has been no halt in the evolution of professional training. The university has grown out of the college purposely, to provide more highly specialized courses in the training of experts, and every kind of professional

school that I know of has enormously expanded its curriculum in response to the popular call for more highly trained specialists. Compare the engineering curriculum of to-day with the course of study called engineering forty years ago. Do the same with the schools of agriculture, of medicine, and of law. Then go over the list of new professional schools established in the last twenty years — schools of dentistry, ceramics, lithography, printing, nursing, chiropody; Christian science at one extreme, and at the other extreme the great foundations for research in the natural sciences, medicine and surgery, endowed by a Rockefeller, a Phipps, or a Carnegie. Vocational training for the boy or girl who leaves school at fourteen years of age and the most specialized research work under the Carnegie Foundation are part and parcel of the same educational movement. This tendency to specialization is the dominant educational characteristic of our time.

Meeting the demand for educational specialists. — Considering the signs of the times, what response should our training schools for teachers make? What need have we for general practitioners in education? What demand is there for specialists? What are the qualifications for experts in education and how shall experts be made?

Until very recently the training schools for teachers have been of one type, and that type has been the normal school. Until within, say, ten years the university schools of education have really been academic institutions, and only a few of them have yet grown out of that stage. So far as differentiation has taken place, the difference between them is that the normal school has emphasized training for elementary work and the university school

has emphasized the training for secondary work. But, as everyone knows, there has been and is still much overlapping. In one respect both are alike; both are engaged in training the novice for whatever work offers surest employment and brings quickest returns. Most American training schools for teachers are engaged in turning out general practitioners.

Training the educational practitioner. — A cursory examination of the curricula of training schools of every grade discloses a striking similarity in the scope and content of the courses offered. First will be noted the fundamental courses common to all. These are quite generally psychology, and the history and principles of education. Next come courses in methodology, which are specialized according to the standard subjects of the curricula in elementary and secondary schools. Beyond this point there is considerable variety, but so far as I can find there is no efficient cause for it except the personal preferences and institutional idiosyncrasies. Whatever difference exists is due more to the age and academic fitness of the student body than to the character of the work that individual students will later be called upon to do.

The status of teachers' training schools to-day is very similar to that of medicine, or engineering, or agriculture twenty years ago. These technical schools were then providing a general curriculum and their graduates were general practitioners. Within the period under review, however, these schools have not only greatly strengthened the scientific content of their fundamental courses, but they have added to their offerings a surprising number of highly specialized courses. The result is that while they

still train the general practitioner, they give him a more specialized training and also make it possible for a few of their best graduates to become expert in some particular field.

The problem of training teachers differs somewhat from the problem of training other professional workers. First, more teachers are needed, very many more, than workers in any other profession. Second, the salaries paid to many teachers do not justify a long period of training, or permit of rigid academic requirement. Third, teachers are generally denied that free and open competition which leads to eminence in most other professional lines. Fourth, teachers are civil servants and are dependent upon the will of the public for their tenure of office. These facts have to be reckoned with, and they generally operate to depress the level of professional service.

The demand for the educational expert. — But when all is said that can be said to excuse stagnation in the training of teachers and to justify conservation in the teaching profession, the fact remains that there is a growing demand for more expert teachers and better equipped educational leaders. It is this call for something more and something better that we must heed.

There is no need, I assume, to argue the proposition that the state must continue to provide schools for the training of the army of teachers, elementary and secondary, needed every year to fill the gaps in the ranks. The need is so great and the economic pressure so keen that many normal schools must be maintained solely for the purpose of keeping our educational system from retrogression. The duty of such training schools is clear to all. They

stand in the breach and must do the best they can with the means and material at their command. Until the teacher's life is made more agreeable, tenure more secure, and remuneration more adequate, many state normal schools will be forced to sacrifice professional ideals to popular expediency. Some that I know are showing a heroism that merits the compliment paid to the old Scotch doctor — we are proud to know them; they are an honor to our profession.

The trend of the times is first to provide general practitioners and then to make a few of the general practitioners really expert in a particular field. In education this means that a way should be found to single out those fit for special service, and that provision be made for giving them specialized training. If the exigencies of the situation force ninety-five out of every hundred teachers into routine work, it is all the more important that the other five be qualified to lead the ninety-five aright. If all cannot be experts, the greater the need of some experts. And when I say experts, I do not mean solely principals and superintendents and supervisors. The influence of one superior teacher of Latin, or geography, or mathematics can be made to pervade a whole city system. The person who knows and can do, is the expert, whether he be in surgery, criminal law, or animal husbandry, or in teaching reading in the first grade, mathematics in the high school, or philosophy in the college. The time is coming when expertness will be as highly prized in the teachers as in the administrative officer, and I am confident that some schools some day will find a substantial way of recognizing superior merit, however it may be shown.

Equipping the expert. — The obviously correct procedure in making educational experts is first to make good general practitioners — teachers who have something to teach and know how to teach it; teachers well grounded in academic subjects who have acquired by training and reflection an all-round view of educational aims and values, and who have learned by practical experience how best to give professional service. The next step is to provide the general practitioner with a body of specialized knowledge and equip him with superior skill in some particular line of work. Knowledge and skill focused on a particular problem are the chief factors in the solution of the problem.

Great as is our need for properly equipped teachers, there is little prospect of our getting many of them. So, too, our ideals of training educational experts will not soon be realized. Just as we are forced to compromise with the public in the training of the novice, so are our efforts to make good specialists likely to prove abortive. Nevertheless, the work must go on. Here and there an institution will be justified in devoting its whole strength to specialized instruction, and it may well be that every teachers' training school can perform some part of the task. The task itself is to find out what to do and how to do it. It is a task of heroic proportions — one that dwarfs every other educational problem of our time.

Responsibilities of educational institutions. — The institution which dedicates itself to specialism in education assumes a grave responsibility. In so far as it is successful its graduates will lead in educational thought and practice and exercise a dominant influence in shaping educational

affairs. The danger is that we may send out blind teachers of the blind.

Sound learning as an asset. — My experience in an institution which has been specializing in education as long as any other, leads me to the conclusion that a teachers' college cannot neglect a few very definite rules of procedure. They are so obvious to me as to seem axiomatic. First, a teachers' college, while a professional school and working solely towards professional ends, should prize sound learning as its principal asset. The chief hindrance to good teaching is lack of knowledge, academic and professional. The greatest obstacle in the way of professional advancement to-day is the ignorance of those charged with educational leadership in school and in public life. So long as we don't know scientifically what should be done or how to do it — know it in such a way that any rational being who takes the trouble to examine the proofs will be convinced — so long will the conduct of school affairs be a matter of opinion. And where opinion prevails the ward politician will always win. Our first duty then, as I see it, is to encourage research and investigation in every line of school work. In some departments it means a specially selected body of academic knowledge, as, for example, that which a teacher of high-school mathematics should know; in other departments it means scientific research into the psychologic foundations of the learning process; and again it means such a knowledge of municipal administration as to make of school management a science as well as an art. The great object is to bring under scientific control the traditional arts of school-keeping and school-teaching.

Knowledge for professional ends. — The second axiom is that a teachers' college should use knowledge for professional ends. A university department of education might conceivably pursue research and investigation regardless of its outcome, but a professional school for the training of educational experts cannot afford to neglect the practical application of approved facts. A teachers' college, in other words, must be a school of both pure and applied science. I have little faith in the ability of any one to draw the line between the two aspects of higher study, but if it can be done, then the teachers' college must be found in the field of applied science. Our success depends upon our ability to use correctly the knowledge of facts and processes concerned in education. Our work, therefore, has a twofold aspect — first, the pursuit of knowledge that will stand the test, and, second, learning how to use such knowledge skillfully for the benefit of society.

Cutting academic red tape. — A third axiom relates to the conditions under which we work. A teachers' college must be free to pursue its work without overmuch regard to academic traditions. While some sort of connection with a university is highly desirable, both for the sake of the inspiration gained from workers in other fields, and the contributions that come from those not directly concerned in our work, there is danger, nevertheless, that too close a union may stifle the life of the young professional school with the windings of academic red tape. A teachers' college, if it deserves to exist as something apart from a collegiate course, must, like a university department, and every other professional school, be given freedom to develop

its field. The spirit of its work, its *esprit de corps*, and its mode of giving instruction must develop normally and naturally according to its needs. This can't be done if some extraneous power decides *ex cathedra* that certain lines of work, generally those nearest akin to those already in existence, are worthy of university recognition, and certain other lines to which they are strangers are unworthy of recognition. In a teachers' college the methods of teaching spelling, or memorizing a Latin declension, or cooking a beefsteak are as worthy of attention as a study of the principles of causation, the doctrine of evolution, or the history of coeducation. No one doubts that the expert surgeon does right in giving attention to methods of tying an artery and bandaging a wound. It takes time to learn the necessary details in professional practice, and a professional school is fully justified in giving the time and allowing credit for it. I mention this desideratum, seemingly so self-evident, because I have found it the chief stumblingblock in university circles. I would go further and say that the ordinary system of counting courses of instruction by the number of hours per week, or the number of weeks per year, should be abandoned in a teachers' college, or at least be modified in such a way as to permit of a combination of courses of variable length given by several instructors. Academic tradition assigns to a given faculty of a university certain functions, and credits only that instruction which members of the faculty may give. A teachers' college should be free to supplement the instruction of its own staff with the services of experts drawn from a wide circle, and it should not hesitate to send its students

into the field for study and instruction under recognized leaders who cannot bring their work to the college. We need something akin to the clinic and hospital service of the medical school. When academic tradition interferes with professional needs, away with red tape. When something can be learned from an expert in a few hours, why refuse to call in the expert or tie it up with a dozen other things in order to make out a two-hour course for a semester? A teachers' college supported by the state should have all the educational resources of the state at its command. Its students should be welcome in any schoolroom and have access to all the information possessed by any principal or superintendent of schools. Its invitation to any teacher in the state to share instruction for an hour or a week should be deemed both a professional honor and a patriotic duty. To one accustomed to the limitations placed upon a private institution, the opportunities open to such a state institution as this seem boundless.

CHAPTER IX

COEDUCATION IN HIGH SCHOOLS[1]

"COEDUCATION is a failure: The Horace Mann School decides to abandon it."

This startling headline in a New York daily paper prefaced the announcement of a change in policy with respect to our college schools. The fact is that after twenty-five years of coeducation we tried the experiment of separating the sexes during the last six of the twelve years' course. The kindergarten and first six grades of the elementary school will remain coeducational. Beginning with the seventh grade, the boys go to a school at 246th Street, six miles distant, and the girls remain in the present building at 120th Street. The boys' school has a playground of four acres fitted for their use in all kinds of weather. The girls have the fine gymnasium and swimming pool formerly shared with the boys. Material equipment, therefore, is about equalized. The special feature of the boys' school is its outdoor life — a country school for boys; the special advantages of the girls' school will be its facilities for teaching the household arts, fine arts, and music.

Is coeducation a failure? — If a country school is good for city boys, why not for city girls? Can't the household arts and other technical subjects be taught as well in one place as in another? Why separate the boys and

[1] A revised reprint from GOOD HOUSEKEEPING, October, 1913, used by courtesy of the publishers.

girls — unless, perchance, you think coeducation a failure?

A matter of expediency. — Those who believe that coeducation is a failure will not be changed by any explanation that I can give, but I insist that our action has no bearing whatever on the main question. We have done only what every good school and every wise community would do under similar conditions. When the present school building was erected it was surrounded by vacant blocks. Playgrounds were easily accessible. Now the city hems us in. Moreover, the school was much smaller than now. School life was simpler, and no such demand was made upon us for the technical training of girls as has come everywhere within the past ten years. Our policy is to keep the school to the front and make it in every way as good as we know how. Our present building and equipment represent an investment of upward of $500,000. It is too valuable to abandon, but it can be made into an ideal school for girls. For three years the boys have been going afternoons in good weather to the playground at 246th Street. The time spent on the trains — twenty-five minutes each way — is a considerable loss, and in order to get in an hour or two in daylight the school has had to close at two o'clock. Under the new plan the boys will spend the day at the country school, and get their lessons and sports whenever each can be done best. The separation will give ample room for both schools, simplify the program, and make possible a more complete curriculum for each. These are the considerations which led us to change a policy of twenty-five years' standing. They are all matters of expediency, and say nothing of the success or failure of coeducation.

What is coeducation? — My explanation is intended merely to show that our action was not the result of profound conviction of the right or wrong of coeducation, and most certainly it was not forced by any dissatisfaction with a school of both sexes, nor any inability to accomplish what the school set out to do when it was established. No breath of scandal has ever touched it, and from first to last it has been a big happy family.

I assume that what prompts a discussion of coeducation in the high school is the knowledge that the problem which confronts us also confronts many other schools. Our experience is not isolated. Communities which have maintained coeducational high schools for a generation are now raising the question for the first time whether or not it is best to do as they have been doing. Questions which many of us thought settled years ago are coming up to vex us. In the light of recent development in secondary education, how shall they be answered?

The first step is to get a clear understanding of what is meant by coeducation. In the minds of some it apparently means that girls should have identically the same schooling as boys. Such a conception may have been justified at a time when it was claimed that girls' intellects were inferior to boys', that a woman should not aspire to do a man's work anywhere — least of all in school and college. But no one who has taught boys and girls together can make that argument and keep a straight face. It is no longer necessary to put boys and girls together in school or college simply to demonstrate that girls are not the inferiors of their brothers.

Equipment and efficiency. — When coeducation is un-

derstood to mean identical education for all, the problem is reduced to its lowest terms, and becomes an absurdity. It is long since anyone has seriously advocated a curriculum so narrow and impoverished as to be acceptable to all. Even in schools where all must take the same lessons and submit to the same instruction, it does not follow that all pupils get the same mental pabulum. No two pupils get the same reaction, mental or spiritual, from any school exercise. One boy may pick his way laboriously through Cæsar's *Commentaries* and retain just enough to earn a passing mark at the end of the term; another, apparently doing the same task, may be leading an imaginary Roman legion in a conquest of the world. The one is working for a diploma; the other is getting an education.

Meeting the pupil's needs. — The pedagogical advance in recent years has been directed primarily toward better teaching. There has been great material betterment, to be sure, but fine buildings and improved equipment are worth while only as means of helping the teacher to do more inspiring work. In methods of instruction our teachers are trained to depend less upon the grind and discipline of school-keeping, and more upon teaching in such a way as to secure a wholesome respect for the subject of instruction and, if possible, an abiding interest in it. It is well known that most boys and girls have their likes and dislikes in school subjects. Time was when a schoolboy's soul was saved by the mortification of the flesh. In some places, where the school is too poor to afford a variety, the puritanic argument is still heard, but I do not know of any school that has grown from, say,

fifty to five hundred pupils which has not increased its curriculum in almost equal ratio. When a school has only two teachers the subjects taught are naturally those which two teachers can best teach; when the third teacher comes in a few new subjects enter, and the curriculum becomes more flexible; when the tenth, or twentieth, or fiftieth teacher is added, less is said of what the pupil needs and more of what he wants. Apparently the pupil needs what he can get when he can get but little; when much is offered his wants determine his needs.

Equal opportunity. — The bane of education is that plausible arguments can be put up to justify any end however unworthy it may be. Identical education was justified so long as it cost less to give a narrow curriculum than a broad one. When it costs no more to give a variety of subjects, the argument changes. Then we argue that there should be equality of opportunity — opportunity for each boy and each girl to get in school the training which will best fit them for the work of life. So far have we gone in this latest stage that vocational training is being introduced everywhere. The rural schools are teaching agriculture and the household arts. By continuation schools, night schools, and special trade schools, both boys and girls in our cities are being fitted to earn a better living. Once grant that equality of opportunity has a place in school policy, and no state dare provide high schools, colleges, and professional schools for the few, without making provision for the vocational training of the many.

Meeting the need for differentiation. — The doctrine of equality of opportunity is playing havoc with many of

our earlier American notions of education. Our first secondary schools were really college-preparatory schools, and our colleges were a step toward professional training for the service of church and state. They were aristocratic institutions, for the benefit of the few who could afford to take advantage of them. When high schools came in, maintained at public expense, the common sense of the community insisted on opening these schools to girls. The public that paid the bills was as much interested in one sex as in the other, and thereby coeducation became the rule in American high schools. But, unwittingly, in admitting girls the seeds of heterodoxy were sown. The admission of girls doubled the possible number of pupils at once, and with the growth of numbers more teachers were necessary. With more teachers, greater flexibility of curriculum was inevitable. The next step is the one we are all facing. When it is possible to provide schooling adapted to the needs of later life, what differentiation, if any, shall be made for boys and girls?

Vocational training. — The fact that eighty per cent of the girls in any high school will marry within a few years and be settled in homes, and that the only specific training they will ever get for their life work must be had in the high school, suggests the desirability of giving girls something more than the boys want. So strong has this feeling become that few high schools to-day omit the household arts from their curriculum. If it be granted that differentiation is desirable in one respect, it is difficult to refute the argument that it also may be desirable in other respects. I fancy that the movement, begun with the introduction of the household arts, will continue until

the high-school training for girls who do not go to college will be sharply set off from the college-preparatory course. Moreover, the colleges will not long refuse to credit for admission the courses pursued by most girls in high schools; the state universities cannot do it if they would, and the women's colleges will finally fall in line. Consequently I predict a growing tendency to differentiate the work of boys and girls in our high schools.

But all this may be beside the mark. It does not answer the question whether boys and girls should be educated together in the high school. Coeducation, if it means identical education, seems to me an absurdity. Coeducation as equality of opportunity for both sexes, and for all individuals, will be settled chiefly by considerations of expediency.

A normal school life. — Judging from what I know of boys' schools and girls' schools and schools for both sexes, I am satisfied that boys and girls can live together in schools as naturally and helpfully as they do in the homes from which they come. I doubt whether a boys' school is any safer for a normal boy, or a girls' school for a normal girl, than is a mixed school. Some boys, perhaps, and some girls would be better off in separate institutions, but in most communities there is no cause to fear any worse outcome from a mixed school than would probably arise if the sexes were separated. This is a hard proposition for a foreigner to understand, but to most Americans it is axiomatic. With us, school life with boys and girls is as normal and as safe as home life. Moreover, there are many refining influences present in a mixed school which are distinctly helpful to boys, and, so far as

my observation goes, the girls lose nothing by being looked to as guardians of the social life of the group. Responsibility builds character, and in a mixed school each sex is charged with the responsibility of maintaining its own social status. This I consider a positive advantage, and one that should not lightly be set aside.

The school as a replica of community life. — School life in an American high school is the life of the community in miniature. If the community life is sound and healthy, the life of the school should be sound and healthy, too. When public opinion is weak or uncertain, however, there is a danger that the mixed school may suffer. Hence it is that the high school in one community may be easily managed and a model of propriety, while not far away another school may fall far short of the ideal. In a great city, for example, where pupils come from all classes and where the parents are flat-dwellers, knowing nothing of those who live on the other side of the partition, a controlling public opinion is out of the question. Pupils know each other only in school, and the gossip of the school does not penetrate the homes, because those at home do not know John or Sarah toward whom gossip is directed. Under such conditions the school is hampered by lack of restraining public opinion. It is natural, therefore, that parents should hesitate to send a daughter into a group of which they know little, but fear much. Such a situation invites opposition to coeducation, and the opposition naturally comes from the patrons of the school.

Physiological maturity. — The strongest argument for the separation of the sexes during the high-school age

comes from the difference in physiologic age. Girls mature earlier than boys. Girls of fifteen are a year or two ahead of boys of the same age, and the boys never catch up during the high-school period. The inferiority of the boys, socially and mentally, is noticeable in any high-school class. I speak, of course, in general terms. In every school some boy will be physiologically older and intellectually more alert than some girls, but in the large, the girls outstrip the boys. The result is a certain stagnation of the boy group, due in part to immaturity, and in part to the repeated failure to excel. When a boy gives up trying because some girl always wins, he soon acquires the habit of being satisfied to stay behind. It is a common saying among high-school teachers that girls learn more, but boys think better. But the boy who becomes accustomed to second place soon fails to think at his best. He marks time, and frequently does not wake up till he finds himself in college in an entirely different atmosphere, dealing with new subjects in open competition with his fellows.

Degrees of sensitivity. — Some boys, a relatively large number, I fear, should be pushed harder in high school than is commonly the case with mixed classes. A hand heavy enough to be felt by boys of sixteen may be too heavy for the girls of the same class. The relatively greater sensitiveness of girls may be disputed, but I think most teachers will agree that girls are prone to take school work more seriously than boys.

Collegiate coeducation. — Whatever the value of the argument for a separation of the sexes during the high-school period, it does not hold good for either the earlier

or later educational stages. I cannot see any inherent differences in college men and women, and I fancy no one finds them in the elementary school. Some women whom I know are physically stronger, intellectually keener, and spiritually more robust than some men of my acquaintance. I doubt whether there is any profession, or even manual vocation, that might not be better served by certain women than by many men. On the other hand, there are men who are essentially more feminine than some women; even the maternal instinct is better developed in some men than in many women. Our environment and occupation, quite as much as any inherited tendency or physical limitation, mold us into the shapes we take.

Equality of opportunity for similarity of aims. — The doctrine of equality of opportunity — a fundamental principle of American society, it seems to me — forces us to the conclusion that our school system must provide free and ample training for every boy and girl. If a boy and a girl aspire to professional service, there should be full equality of opportunity; so, too, if either wants to become a farmer, a builder, or a stenographer, the way should be open and the means available.

The obvious corollary of this proposition is that those whose aim is the same should have the same education. The woman who studies medicine, or teaching, or law, needs no specialized course of training because she is a woman. Professional service is without distinction of sex. Merchandizing, stenography — even laundering and dressmaking and dishwashing — are not peculiarly feminine occupations. The man who wishes to excel in them must fit himself as does the woman.

Opening the door to future needs. — I see no reason, therefore, to modify a college-preparatory course to suit the needs of girls or boys; their needs are identical, so far as they go. The fact that two thirds of the girls will soon marry means that the career of the largest group in the school is definitely known; for them a specialized course is not only desirable, but it is almost criminal not to give it. But if any girl prefers Latin to cookery, and aspires to become a classical scholar rather than a domestic technician, I think she is entitled to all the help the school can give, and that what she gets should be what the boy with the same ambition gets. There is a study of science that leads to a sane understanding of the principles of nutrition and sanitation as required by the housewife, and there is a study of science that leads to the practice of medicine. The girl who is to marry should choose the one, and the girl who is to become a physician should take the other. It would doubtless strengthen the future housewife to take both, just as it would be well for the married physician to have both, but life is too short to do everything that one would like, or to get all the training that one should have. Choices must be made, and fortunate is the man or woman who chooses wisely. All that the school can do is to offer the widest possible range of choices, and to keep the door open toward future needs.

CHAPTER X

THE VITAL THINGS IN EDUCATION [1]

SOME time ago I was asked to address a convention on the subject, "What are the vital things in the education of young women?" The topic was not of my choosing, but the question interested me. It should interest everyone, either teacher or parent. From the parent's standpoint it is oftentimes a very proper question to put. What have courses of study and methods of teaching to do with things that are vital in education? Where are the ablative absolute, the rule of three, and quadratic equations in such a scheme? Is there anything of more consequence than the ability to parse "Paradise Lost," to spell Nebuchadnezzar, or to work every example in partial payments (every one, I mean, that the textbook gives — no one ever saw the like outside a textbook)? To ask a pedagogue what is vital in education is a shrewd way of finding out whether he belongs to the union or not. Nevertheless, I told them plainly what I thought of the education of girls.

Problem of coeducation. — Since then I have been thinking of what is vital in the education of boys. And I really cannot see where to draw the line. We want our girls to become women — the best possible women; and we want our boys to become men — the best possible

[1] A revised reprint from GOOD HOUSEKEEPING, March, 1914, used by courtesy of the publishers.

men. The sexes may differ in important particulars, just as individuals of the same sex have peculiar characteristics; but what is essential in education pertains to all alike.

The other day I received a letter from the president of a city school board in England who wanted to know what I thought of coeducation. My reply was that I didn't think much about it; if he meant the presence of both sexes in the same school, I could see no harm in it as long as parents supplied us with both boys and girls; if he meant the same training for both sexes, he would have to seek further for his information, because in this country no two boys have the same training, to say nothing of the identical training of both sexes.

The attainment of ends. — Herein is an educational principle of wider application than we ofttimes realize. If it is hard to find two people who look alike, it is harder still to find two personalities who are alike. By inheritance, temperament, and taste I am unlike any other being, so far as I know, and no conceivable discipline that I could be subjected to would make me just like anyone else. Browning says in his "Paracelsus" that

> Truth is within ourselves . . .
> and, to know,
> Rather consists in opening out a way
> Whence the imprisoned splendor may escape,
> Than in effecting entry for a light
> Supposed to be without.

What is essential in education is not so much a matter of discipline and training as it is a question of ends to be

attained. For every mountain peak worth scaling there may be innumerable paths that lead to the summit. For every boy or girl worth raising there may be many routes to success in life. But a person's attainment of success should be as patent as standing on the mountain peak.

Where education begins. — Knowing what we want our children to become, the practical question is: What should we do for them while they are growing into manhood and womanhood? It is a question directed to parents as well as to teachers — I myself am speaking as a parent. What counts most in the making of men and women? If we parents were free to act in the best interests of our children; if schools did not have fixed schedules and classes and courses of study and marks and examinations and prizes and promotions and graduations and bouquets; if teachers were all-wise and omnipotent; if our friends and neighbors would only let us do some things that they don't care to do, instead of forever goading us on to do as others do; if only we had the courage to do what our common sense dictates — what would we do with our children while they are growing into men and women?

Laying a sound foundation. — Shall we send them to college? I fancy some of us put that question to the babe in the cradle. At any rate, I know of parents who enter their boys in a famous New England school as soon as their names are decided upon. Unfortunately, or fortunately, I don't know which, the schooling of girls is not taken quite so seriously. But nevertheless we do begin to think very early of the schools to which our daughters are to be sent. We begin inquiries concerning dancing masters and music teachers; we discuss the relative values

of classical and modern languages; we are very insistent on good spelling and a proper pronunciation; all these are matters within our own control. But the baby's food, the air she breathes, and the water she drinks, these are mysteries known only to nurses, physicians, and grandmothers, just as the bacteria and bacilli are dispensations of Divine Providence. So long as the baby is contented and happy and lets us sleep o' nights, what difference does it make whether or not her diet contains the proper proportions of fats, proteids, and carbohydrates? Carbohydrates are starch, and starch becomes sugar in digestion; what harm, then, can sweets do? The only trouble with this argument is that most of us parents do not even know enough of chemistry to use the terms properly, to say nothing of making the right food combinations. Like politicians who are willing to overlook a little matter of constitutional law among friends, so we are quite willing to neglect the nutrition of our children in the home. No greater shock ever came to me than when I once called a physician to diagnose the illness of one of my children and was told very bluntly that what primarily ailed the child was lack of food. I am satisfied that the major part of our bodily ills is due to the bad start made in the nursery. With proper nutrition and plenty of sunshine and out-of-door exercise, resistance to disease is at its maximum, and the conditions are right for the development of a sound mind in a sound body.

The prime essential. — The first question, therefore, is not as to what college we shall send the child to, but What shall we give it to eat? If higher education is con-

cerned at all, the question should be, What college or course of study should the parents enter?

When you ask me what counts most in education, I have no hesitation in putting to the front good health. I cannot think of anything worth attaining in life for man or woman that will not be worth more, that will not give more joy, satisfaction, and zest to life, if good physical health accompanies it. "What shall a man give in exchange for his soul?" He has nothing to give that is worth taking if his digestion is ruined, his nerves shattered, or his brain unbalanced.

Health-instruction for parents. — The responsibility for good health does not rest primarily with the school. It is the duty of the teachers, of course, to observe hygienic laws, and not to ask more of a pupil than can reasonably be expected, but what is usually called "overburdening" of the pupil is really underfeeding and malnutrition. The schools have sins enough of their own to atone for without adding those that are committed by the ignorant but well-meaning parent. The pathetic part of it all is that the mischief is done before the school has a chance to try its hand. Only one recourse is left to the school and to the intelligent parent, namely, to instruct the boy and girl, who will some day have children of their own, how to save their children from those faults from which they themselves have suffered. "Is it not an astonishing fact," Herbert Spencer asks, "that though on the treatment of our offspring depend their life and death, their moral welfare or their ruin, yet not one word of instruction is ever given to those who will hereafter become parents?"

I do not know how long we shall wait for such instruction, but the time is coming when it will be given. If it is incompatible with college education, then college education will have to give way to something more rational. If a boy cannot be taught how best to use his own body, there is something lacking either in the boy or in his teacher. If the principles of reproduction and heredity, of physiology and hygiene, of food selection and preparation, cannot be given properly in a secondary school to girls who will soon be in need of such information, then there is something radically wrong with those schools, or with our modern notions of what is worth teaching.

Pledges unfulfilled. — The greatest peril of our education to-day is that it promises an open door to every boy and girl up to the age of fourteen, and then turns them ruthlessly into the world to find most doors not only closed but locked against them. Throughout this country we are telling thousands — yes, millions — of boys and girls that anything they please may be had for the asking, and during the six or eight years of the school course they are instructed that nothing is beyond attainment. Then, too, our democratic notion of equality of opportunity is responsible for the attempt to hitch some very ordinary wagons to stars of the first magnitude. The result can only be bitter disappointment. Instead of a happy, contented, and able farmer, we make of the ambitious country boy a clerk or helper in some city industry, or a cog in some factory wheel. Instead of helping the quick-witted city boy, who leaves school at twelve or fourteen, wise far beyond his years, to employ his mental strength in shortening the term of apprenticeship in the trades

and in improving the quality of the output, we turn him over to the tender mercies of the trade union, or allow him to bungle ahead in his efforts to become a capable workman. What wonder that our skilled craftsmen are foreigners, and that our best American boys become petty politicians or walking delegates or seekers after the soft places? We do not teach them to do the day's work in such a way as to find pleasure and satisfaction in it. The result is grumbling and faultfinding and discontent in private life, and in civil life the beginnings of socialism and anarchism.

Morals and manners. — Think of what it means to our girls to enjoy for eight or ten years daydreams which the first contact with life shatters. Is it any wonder that the girl of eighteen or twenty who has never had an hour's instruction in the scientific and æsthetic interpretation of those duties which confront her should find no pleasure in homemaking? The situation is bad enough in the country, but it is infinitely worse in our great cities. What chance has the girl of the tenements even though she be well-schooled and quick-witted? She leaves the school at fourteen or fifteen to get her postgraduate training in housekeeping from her mother. Think of what that means. A home of two or three or four rooms in a crowded quarter; every member of the family at work or seeking it; living confined to the barest necessities; no conveniences for doing the ordinary work of a home, even if that were necessary. What is left to the girl? The street; and it is not remarkable that some thoughtful persons should hold our public schools responsible for adding to the danger of city life for bright and attractive girls. The surest

way to break down family life and destroy the sanctity of the marriage tie is to mate an ignorant man with an ignorant woman — ignorant, I mean, of what marriage means, and unfitted to meet its obligations.

Effective social participation. — The next desideratum is proper manners and morals; in a word, suitable habits. I am not sure that there is any hierarchy in these practical ideals. Good health was put first because without it all else is worthless; proper manners and morals next, because without some such norm there can be no effective participation in social life.

It is a commonplace that a man must be honest, and that a woman must bear a good reputation. We go even further and say that the great object of education is the development of good character; but we do not always include in that the whole round of conduct which marks the agreeable member of society.

The true aim of education. — We are not concerned here with the origin or inculcation of customs or conduct. It matters little whether they come from mere imitation, or result from definite instruction reënforced by persistent effort. It is what we do that counts most in society. And every grade of society demands that its members conform to an accepted norm. We recognize this insistent demand when we require our children to eat with a fork, to dress becomingly, and to speak grammatically. Reverence, courtesy, gentleness, sympathy, modesty, obedience, bravery, when socially considered, are virtues crystallized in good manners and morals. They are the surest evidence of what we call good breeding. Moreover, from the social standpoint these virtues have a value

directly proportional to their habitual expression. Veracity as a fixed habit is far preferable to truthtelling for a consideration. Temperance induced by fear of evil consequences is far less effective than instinctive self-restraint. When these desirable modes of conduct become thoroughly ingrained — become "natural" as we often say — then character is fixed. "Manners makeyth man" is an adage of greater truth than is commonly recognized in our modern educational practice.

The joy of fellowship. — How to get on with other people — for that is really the criterion of proper manners and morals — is the chief end of one great type of education. The Persians, according to Xenophon, insisted that their leaders should learn both to rule and to be ruled, to command and to obey. These ends are not secured by formal instruction; they are the result of discipline under conditions which are favorable to the fixing of habits. Education, Professor James says, is the organization of acquired habits of conduct and tendencies of behavior. Walt Whitman, in one of those strange outbursts of his, tells how it is that the child goes forth every day into a new world and becomes part and parcel of all that he beholds.

There was a child went forth every day;
And the first object he looked upon, that object he became;
And that object became part of him for the day, or a certain part of the day, or for many years or stretching cycles of years.
The early lilacs became part of this child,
And grass, and white and red morning-glories, and white and red clover, and the song of the phoebe-bird . . .
And the schoolmistress that passed on her way to the school,
And the friendly boys that pass'd — and the quarrelsome boys,

And the tidy and fresh-check'd girls — and the barefoot negro boy and girl,
And all the changes of city and country, wherever he went.
His own parents, . . .
The mother at home, quietly placing the dishes on the supper-table;
The mother with mild words, clean her cap and gown, a wholesome odor falling off her person and clothes as she walks by;
The father, strong, self-sufficient, manly, mean, anger'd, unjust;
The blow, the quick loud word, the tight bargain, the crafty lure,
The family usages, the language, the company, the furniture, the yearning and swelling heart,
Affection that will not be gainsay'd, the sense of what is real, the thought if after all it should prove unreal,
The doubts of day-time and the doubts of night-time, the curious whether and how,
Whether that which appears so is so, or is it all flashes and specks? . . .
These became part of that child who went forth every day, and who now goes, and will always go forth every day.[1]

A very serviceable education can be given with a modicum of formal instruction. In fact, we seldom hear a course of study justified because of the information it gives. It may be well that some of these courses put forth no such claim, but the truth is that much of what we claim for study may be gained — and is gained by far the greatest number in any society — from leading a wholesome life with one's fellows. English education, as given in the great public schools, is preëminently of this type.

The day's work. — The next vital thing in the education of anybody, man or woman, is the ability to engage in useful occupation. I had almost said the ability to earn

[1] This selection from Walt Whitman's *Leaves of Grass* is used by special arrangement with the publishers, Doubleday, Page and Company.

a livelihood, but someone may object to the utilitarian limitation of that statement. Let me put in the word decent — the ability to earn a decent livelihood — and I am as satisfied with the one expression as with the other. We do want both our boys and our girls to succeed in doing something worth while and suited to them. We also want them to have sufficient ability in some useful occupation to gain a living thereby in case of need.

Now I wish to emphasize this demand. We do want just this thing — all of us — regardless of our social standing, or our wealth, or any other consideration. If sometimes we fail to talk out loud about it, the reason is that we are willing to take chances on the future, to run the risk of leaving to someone else the duty of instructing our children in doing the day's work when the need of the day's work arises.

I have said that this categorical imperative is directed to girls as well as to boys. The woman who has nothing to do in life may be left out of account. And if there be work for woman to do, her pleasure and satisfaction in life, her influence upon others, and her returns for her labor, all demand that she be fitted for her task. I am not thinking only of so-called "working women," nor of professional women, nor of any particular class of those who work for money. If anyone thinks that getting married relieves a woman of work and responsibility, let him try it and see for himself. If there is any occupation that induces greater physical strain and nervous waste, any profession that calls for more of the moral virtues, or profits more from the use of common sense, than the profession of wife and mother, I should like

to know what it is. It is not a money-making profession; it is, on the contrary, preëminently the money-spending profession.

Earning and spending. — In my opinion, to spend money wisely is even more difficult than to earn it. We hear much of a living wage, but the real problem is not in what the workman receives, but in what his wife spends. I will undertake to guarantee the stability of our American democratic institutions if you will see to it that American wives are taught how best to spend the money their husbands earn. Somewhere in that last ten per cent of a man's income are hidden away his present happiness and future prospects. If that last ten per cent is expended along with what has gone before, life must soon become a dreary routine, destructive alike of good health and high ambitions. If we could stop the noisy clatter of our educational machinery for a moment, I think we should hear in the awful silence these words, "With all thy getting, get understanding." And their interpretation is this: the chief end of education is not, as many seem to think, to earn, to earn, to earn, but rather to spend, to spend, to spend; to spend prudently that there may be no waste; to spend wisely that the best may be obtained; to spend generously that as many as possible may be benefited thereby; to spend money that represents a man's toil so as to lighten his labors; to spend energy in such a way as to give increased strength; to spend time in order that more time may be had for the things that count.

The art of discrimination. — This leads me to my fourth point — the appreciation of what is best in life. Good

health, proper conduct, ability to earn a livelihood (even to the extent of accumulating great wealth) are meaningless to him who knows not the relative values of what life offers. Lord Kelvin has said that the end of education is first to help a man earn a living, and then to make his life worth living. Life — human life — is a succession of choices. It is the glory of man that he can choose, that he is free to put his own valuation on what is offered him. How important, then, that he should see life in its proper perspective, that he should feel the charm of nature, see the beauty in art, feel the uplift in literature and history, respect the truths of science, take comfort in religion, and find good in everything. This is the goal of all education. All else is a means to this great end. The one thing needful is the ability to discriminate in what life offers, to single out the best, and to appropriate it in the struggle for attainable ideals.

Educating the leader. — Notwithstanding what I have said of the shortcomings of our public schools, I do believe in the best ideals of American education, just as I have an abiding faith in the ideals of American life. Equality of opportunity as guaranteed in our civil and industrial life is a possession of which we may well be proud. It comes to us sealed with the blood of our forefathers, and it is our duty to hand it on unsullied to our children. But we should not blind our eyes to the fact that it is the greatest experiment of the ages. Every other great nation that I know of has attained its greatness by a system of education that is calculated to keep the many down, while helping up the few. Germany and England have had one system of training the masses and another and

quite different system of training leaders. Our salvation depends upon our ability to work out a scheme of education which will make of every person who wills it a leader in his own way. The man of trained intelligence who works on the farm, or in the factory, or at a trade, may be a leader of as much social value as the man who engages in business or enters a profession. Granted good health, and habits of conduct which make of one an agreeable member of a community, and the ability to earn a decent livelihood, I have no fear of social unrest or domestic unhappiness. The man or woman who can do something well is sure to take pride in the work, and to find satisfaction in doing it.

The life worth while. — The final effort in all education, therefore, should be directed to the proper appreciation of the opportunities that life offers. The education to which we are accustomed in school and college is properly the evaluation of what is best in life. I do not ask that we abate in the slightest degree our zeal for the best in literature, history, and science. My plea is that we do also these things of which I have been speaking — not that we should leave the others undone.

The struggle to find what is best, and the determination to pursue that course to the end, is the record of every good man's life. It is well that history and literature portray great characters and record their struggles. What man has done, I can do! — is the watchword of the boy who is surely going forward. The attainment of any virtue is made easier if good example attend the precept. The great ideals of Christian character were exemplified in the life of the Master. He did not appeal to his dis-

ciples to follow truth for its own sake, nor did he present the beautiful and the good in the abstract. And anyone who would uplift boy or girl, man or woman, must show that the good, the beautiful, and the true are the dynamic forces which make life worth living. The greatest good is the good that man can do; the purest beauty is the beauty that man may be; the noblest truth is the truth that makes man free.

The lesson of life. — Not long since I visited in the South an institution that is linked with the names of two great men — Washington and Lee University. I was taken into the chapel on a beautiful spring afternoon by a man eminent in Southern life, who himself was a student in that institution about forty years ago. He said: "My home was near here in the Shenandoah Valley, and I was a boy too young to go to war. My father went, and did not come back. One brother after another followed him, and failed to return. Home was broken up, everything lost, father and brothers gone. After the war was over, when General Lee returned to the ways of peace and settled down as a teacher and as president of this institution, my mother and I felt that there was only one thing for me to do, to become a student under General Lee."

I thought of those four horrible years when that valley was a scene of carnage and destruction, when Lee's victorious army would sweep northward, and then Sheridan and his men force him back; back and forth through that valley, the granary of the Confederacy, they fought. And then I thought of that little boy, too young to take an active part in it, but not too young to suffer the consequences, striving to get inspiration from the nearer

approach to the man who was reckoned a demigod by the people of Virginia. And as we stood in that chapel that afternoon and looked upon that magnificent recumbent statue of General Lee, this man said: "Do you know, the turning point in my life came one night right on this spot. It was a custom after General Lee died for the cadets of the school, the students, to stand guard over his tomb, and all night long I stood in this aisle with a musket in my hand, standing guard."

Can you imagine what that means for a boy or for a girl? Why, that is almost all of education — standing guard, not over, but with, a noble soul!

CHAPTER XI

SCOUTING EDUCATION [1]

IN times of unparalleled storm and stress, when the traditions of centuries crumble and the ideals of civilization are weighed in the balance of war, the patriots of every nation give anxious thought to the social order that shall arise from such chaos. Preparedness is the word that springs to every lip. It is used alike by those who would take the easiest way to let well enough alone, and by those who wish to reconstruct the world. In its lowest terms, it means preparation for military defense against foreign aggression; in its highest reaches, it aspires to the regeneration of human nature, so that the brute in man shall forever be held in leash. However men may differ as to the means of bringing on the millennium, the fairest flower in the blood-soaked fields of the world to-day is the universal desire for peace on earth and good will to men.

Rights and their correlatives. — There can be no peace without good will among men, and no will is good that does not beget justice, protect ownership, and secure life, liberty, and the pursuit of happiness. These are the rights of man, incorporated by our forefathers into the fabric of our government and bequeathed to us as a precious legacy to have and to hold in trust for all those who would be citizens of a free and independent state. The

[1] A revised reprint from the TEACHERS COLLEGE RECORD, January, 1917.

right to worship God in one's own way; the right to trade, to conduct commerce, to accumulate property, to take up land, and, by occupation, to own it without restriction; the right to barter with one's neighbors in matters spiritual, temporal, and political; the right to be one's own master — these are the ideals of the founders of our nation. And when they set up a government of their own, they took particular pains to see that their rights were secure.

Read the Constitution of the United States, and note the rights and duties enumerated. Duties are enjoined only upon officeholders for the protection of the rights of citizens; and, as if the directors of the joint-stock corporation could not be trusted to return adequate dividends, a string of amendments has been added, still further defining the rights of individuals. No word anywhere in that famous document directly defines the duties of citizens — an omission that would have wrecked the Republic in its infancy, except for the genius of Chief Justice Marshall and the assiduous labors of a few patriotic statesmen. But for more than a century we have slowly been learning the lesson that rights have their correlative duties; that the right to one's own property imposes the duty of protecting the property of others; that the right to freedom brings with it the duty of obedience to the law; that the right to pursue happiness enjoins the duty of guarding others from misery; and, in a word, that the rights of citizenship, secured by government, make it the duty of every citizen to give patriotic service whenever needed and at whatever cost.

Problems of individuality. — Individualism has so long been dominant in our social and political life, it is no wonder

that it has also directed the course of our education. The theory that all men are created equal is easily interpreted to mean that any man may become anything. Granted that the individual has a right to direct his own development, does it follow that he may do as he pleases? And if the state provides schools and teachers for the education of the young, what has the state a right to expect from its training, and what is the duty of its pupils towards the public? Can individuals naturally selfish, who have the American way of wanting to do as they please, be trained in schools to be efficient, patriotic citizens? If so, what kind of training should an American school give to the prospective American citizen? Such questions as these are pressing for answer now as never before in our history.

Teaching the duties of citizenship. — A survey of American education does not disclose much evidence of a controlling desire to promote patriotic service. Indeed, if one were to confine one's attention to the work of the schools, particularly of the public schools, where, if anywhere, one might expect to find the most direct efforts towards teaching the duties of citizenship, surprise and disappointment would follow. Teachers there are, in great numbers, who see the future man or woman in their pupils, and who labor unceasingly to fortify them against their day of need; but the test that passes pupils from grade to grade does not take into account growth in character or moral strength. The work of teachers is judged primarily by what their pupils know. The virtues and vices of our future citizens are a sealed book which our educational authorities do not open to inspec-

tion. The state seems to have overlooked the fact that intellectual power is as great an asset to the crook as to the honest man. Public safety, therefore, calls for more than the schools are officially encouraged to give.

Environment as an educational factor. — Education, however, is not wholly a matter of schools and school training. Indeed, if it were, we should come badly off. Consider for a moment the time problem. Our children are in school at the most five hours a day, five days in the week, for forty weeks in the year — a total of 1,000 hours. The average child of school age is awake fifteen hours a day for 365 days in the year — a total of 5,475 hours. Any way you reckon it, the normal child is receptive, getting impressions, using ideas, reaching conclusions, fixing habits, organizing his modes of behavior which, Professor James said, is education, four hours outside of school for every hour spent in school. Let the school be administered by directors of the widest vision and the highest ideals; let it be equipped with the best appliances, and staffed by teachers with the ripest scholarship, the finest training, and the clearest pedagogical insight, and you still have to reckon with forces inherent in the nature of the child and incident to his life in a society that are overwhelmingly and persistently directing his personal development.

Educational deadwood. — Next consider what the child is required to learn in school: first, to read, write, and spell correctly, and to speak grammatically a language almost as foreign to the child and as artificial at the time as any alien tongue; second, to learn numbers and their manipulation in a way that does not appeal to him, be-

cause beyond his needs, and to an extent that often surpasses belief; third, to learn something of history and literature, which may or may not be amenable to reason; fourth, to become familiar with certain elements of geography and natural science, which may or may not be elementary nor natural nor science; fifth, to dabble in music, art, handwork, cooking, sewing, and a variety of subjects more or less dependent upon the whims of school boards and the preferences of teachers. If to this showing of what is ordinarily regarded as essentials, you add the "deadwood" that has floated into our schools on the stream of tradition and remained there, because of the conservatism of teachers and the wisdom of college faculties, you have a very formidable collection of materials which custom decrees shall be packed away somewhere and somehow in a child's cranium.

The child's share of the teacher's time. — In the third place, I want you to consider how much of a teacher's time the average child gets in a school day. In our rural ungraded schools, the teacher may have from fifteen to forty different classes in a five- or six-hour day. When such a school has six or eight groups — not an uncommon occurrence — the hours of schooling become minutes, and not many of them. Our Commissioner of Education reports: "If every minute of the five-hour school day could be used for recitations, the recitations would have an average of nine and one-half minutes each." Then turn to our city schools, with their classes of forty to sixty pupils ranged in rows, disciplined to silence, worked in teams. How many minutes a day does the average child get for personal contact with the teacher? How much

time is given him for reflection on what he learns and for its assimilation into his spiritual life? What per cent of efficiency should be expected from his work?

Inadequacy of the teaching staff. — And, finally, take account of the administration of our schools. Note that our rural teachers are but little older than their eldest pupils, with little more training for their work than the schools give in which they teach; that the teachers in our city schools are mostly young women who can be forced to work for less than the wage of street cleaners or of the cooks in our kitchen; that few of our principals and superintendents have had any professional training whatever, although we live in a generation that requires trained physicians, trained lawyers, trained engineers, even trained veterinarians to look after our hogs and horses and cattle and lap dogs; and that the state entrusts the management of the largest, most far-reaching and expensive department of civil government to boards of directors with little knowledge of child nature or school work or social needs. What wonder that school funds are squandered in this country by the millions of dollars annually, that teaching is regarded as a trade rather than a profession, and that there is widespread dissatisfaction with the results of schooling! It is providential, however, that guardian angels keep watch over children and fools, otherwise the pupils in our schools and we who send them there would long ago have come to ruin. The truth is that, however badly our children do, it is safe to say that their teachers do worse; and, bad as teaching is, the adminstration of our schools is worse still.

Limitations of school offerings. — Under prevailing

conditions, therefore, the most that can reasonably be expected is that our children should acquire in school a very moderate amount of useful knowledge, a few desirable habits in the use of language and numbers, and some ability in facing squarely and solving accurately the problems that they meet in life. We have no right to expect children on leaving our public schools at fourteen or sixteen years of age — and about nine tenths of them get no schooling after sixteen,— to be either clear thinkers or independent workers. They are unformed, not to say uninformed, but energetic and ambitious humans. At best, the school has given them a taste of the good things of life, has opened the door to opportunity, and roused in them a desire to take advantage of what life offers. It has done little, and, as things are at present, it can do little, to make them efficient workers in any vocation, or to equip them with those habits of mind and body essential to good citizenship. In other words, the school of to-day lacks the time, the means, and the professional ability to develop in its pupils the moral character which we expect in the good citizen. It does afford, however, the foundations on which that kind of character rests, and it does uphold the ideals towards which its pupils strive.

The world outside the classroom. — Fortunately, education is more than schooling. The development of character for good or ill goes on, whether the child is in school or out of school. His impulse to imitate what he sees and adopt what he likes in the real world about him is more powerful, because more natural, than the tendency to identify himself with the artificial life of the schoolroom.

Hence the commanding importance of the playground and the educational significance of games that enlist a boy's best self in active coöperation with his fellows. If nothing better offers, he will take to the streets and find his place in a gang of kindred spirits, tearing down or building up his neighbor's property and his own character at one and the same time. The real world of the public-school boy, "the world in which things of vital importance happen," as Kipling puts it, is the world outside the classroom — the world of the home or the street, of the church or the saloon, of the library or the pool room, of the club or the gang, or the world of brooks and trees and God's out-of-doors, or the world of alleys and back-yards and Hell's Kitchen.

Teachers who are concerned with the education, as distinguished from mere instruction, of their pupils are earnestly seeking to merge their work with the best influences in the home, in the church, and in society. They welcome all supplementary means of arousing a boy's ambition, of quickening his emotions, of attracting his interests, and of fixing his habits. They like to see him give himself whole-heartedly to something worth doing, whether it be work or play, and like to see him stick to the job until it is done They know that self-reliance, self-direction, and self-control come in no other way, and that preaching about the finest ideals of life leaves the boy untouched, unless he himself builds them into his own character.

A power for boy betterment. — It is for these reasons, therefore, that I declare the Boy Scout movement to be the most significant educational contribution of our

time. The naturalist may praise it for its success in putting the boy close to nature's heart; the moralist, for its splendid code of ethics; the hygienist, for its methods of physical training; the parent, for its ability to keep his boy out of mischief; but from the standpoint of the educator, it has marvelous potency for converting the restless, irresponsible, self-centered boy into the straightforward, dependable, helpful young citizen. To the boy who will give himself to it, there is plenty of work that looks like play, standards of excellence which he can appreciate, rules of conduct which he must obey, positions of responsibility which he may occupy as soon as he qualifies himself — in a word, a program that appeals to a boy's instincts, and a method adapted to a boy's nature.

The scout curriculum. — This is not the place to discuss the Boy Scout program. Most of you know it much better than I do. But I would consider myself a prince among schoolmen, if I could devise a school program in which the curriculum should appeal so directly to a boy's interests and the courses of study apply so serviceably to adult needs. Every task in scouting is a man's job cut down to a boy's size. The appeal to a boy's interests is not primarily because he is a boy, but particularly because he wants to be a man. Scan the list: agriculture and angling, blacksmithing and business, carpentering and civics, dairying and mining, music and plumbing, poultry and printing, first aid and politeness, life saving and nature study, seamanship and campcraft, patriotism and cooking, and scores of other accomplishments and activities requiring accurate knowledge that is susceptible

of direct and immediate application to everyday life. Every one of these tasks holds the boy, not only because he is a boy and likes to do them, but because they are tasks which grown men find useful. It is the man in the boy that is emphasized, and the type of manhood idealized is that which strives "to stand for the right against the wrong, for truth against falsehood, to help the weak and oppressed, and to love and seek the best things of life." Hence the scout oath taken by every boy on becoming a tenderfoot: "On my honor, I will do my best (1) to do my duty to God and my country, and to obey the scout law; (2) to help other people at all times; (3) to keep myself physically strong, mentally awake, and morally straight."

The scout curriculum may appear superficial to the pedagogue, and doubtless much that is taught is neither systematic nor comprehensive. But scoutcraft is not intended to be a substitute for schooling. It is a device for supplementing the formal instruction of the schools, by leading the boy into new fields and giving him a chance to make practical use of all his powers, intellectual, moral, and physical. The best thing about it is its extraordinary diversity, reaching out to boys of all degrees of mental ability, in all kinds of social environment, and creating for them a real need to do their level best.

Upholding character and citizenship. — But the most significant contribution of the Boy Scout movement to education is its pedagogical methods. As a teacher, I take my hat off to Sir Robert Baden-Powell, the genius who in a bare decade has done more to vitalize the methods of character training than all the schoolmen in this country

have done since the Pilgrims landed on the New England coast. We have preached the virtues of a government of the people, by the people, and for the people, and have sought for the best means of perpetuating a nation conceived in liberty and dedicated to the proposition that all men are created equal. There have been times when we doubted whether a nation so conceived and so dedicated can long endure. We know full well that the experiment must eventually fail, if our citizens grow up accustomed to the evils of selfishness and greed and indifferent to the ravages of pillage and plunder. And failure is just as certain, even if a little longer deferred, if our citizens are not trained to participate actively and constructively in upholding the virtues on which both personal character and good citizenship are based.

Education through habit. — In the development of character two processes are constantly at work, one tending to restrict the initiative of the subject, and the other to strengthen his personal will. The human infant is a rank individualist. His first cry is a protest against the treatment he receives. He wants what he wants when he wants it. But gradually, despite his objections, he becomes habituated to his environment. He must take the food supplied him, whether he likes it or not, and eventually he calls it good. He acquires a language that is not of his own making, and finally speaks as those about him speak. Even the inflections and intonation of voice peculiar to his locality come to mark him as provincial. He may prefer to eat with his fingers and he may abhor the clothes he wears, but in time his table manners and habits of dress conform to prevailing fashions. Tasks at

first laborious grow easy with practice, and practices, at first distasteful, become agreeable and necessary to his happiness. This is the process of education through habit, by which the individual is accustomed to the restrictions and requirements of his social group. It is the way he acquires the likeness of his kind; it gives him his morals and his manners, and it sets standards of conduct which he dare not disobey. Witness the tyranny of the fashions and the punishment visited upon the obstreperous member of society who ventures to disregard the injunctions of the prevailing code of honor or the mandates of the moral order. Habits are the basis of all efficiency in accomplishment, whether in personal service or vocational employment. Otherwise, we should spend our days in learning anew the art of lacing our shoes or holding a pen or reciting the multiplication table. Moreover, a workman likes to do what he can do well, and doing something well brings its own reward in pride of accomplishment, a living wage, and contentment with results. The satisfaction that comes from doing an honest day's work is the surest guarantee of conservative citizenship.

The development of individuality. — The other process in education exerts a force diametrically opposed to the trend of custom and habit. It springs from the innate desire of the individual to be himself rather than to be someone else; is the outgrowth of his impulse so to protest when pressure is brought to bear upon him. One way consists in yielding to guidance; the other, in guiding one's self. One force makes for identity of kind, conservatism and efficiency; the other, for individuality, initiative and progress.

Scout pedagogy. — These two forces, however, are but the two sides of the same shield, opposed, yet essentially one in the course of education. A man rises on his dead self only in the sense that he rises by steps fixed in habit. The more steps in his ladder securely fixed, the higher he can rise. Once a child is in control of the complicated process of walking, he may use that habit in learning to run, to swim, to skate, and to ride a wheel; writing, made habitual, becomes so easy that the writer's whole attention may be centered on what he writes. Habit gives such command of language that speech unconsciously follows thought; habit makes us familiar with our alphabet and tables, written signs and symbols and rules and abstract terms; habit begets our attitudes and appreciations, and determines our behavior in every crisis in life. Nevertheless, habit is only the handmaid of invention. Originality consists in giving to fixed habits a new organization and a progressive existence on a higher scale. When Bell invented the telephone, he used no material, law, or habit of operation not known before; but he did devise a new combination of them, which has forced us all into a new round of customs and habits in communication. Every normal human being, and every social group, from the family to the nation, is on the way somewhere; the important thing is that they should have leaders who know the way and who, like trustworthy scouts, will risk their lives that their comrades may live.

While I have been speaking in parable, you surely realize that I have had the pedagogical methods of scouting in mind. When the tenderfoot takes his oath, he promises to do something. To be sure, it is stated in abstract terms

and is a bit grandiloquent, but it serves the purpose of rounding up his moral energy. He is asked, as it were, to gird up his loins and to get set on his mark for the race to come. Then he is obliged to do something; in fact, he has already qualified in certain small "stunts," and every step in advance is marked by new habits fixed through persistent effort. Step by step, habit by habit, he passes from grade to grade. The content of his curriculum I have already discussed. What concerns me now is the method; and that, I repeat, is superb.

Doing well something worth doing. — In contrast to the loose control of the home, sometimes severe, often lax and always personal, and to the discipline of the school, which is generally mechanical and autocratic, the methods of scouting asks the boy to do something that he thinks worth while and that he wants to do. Many of the tasks are self-imposed, because the boy chooses what he shall undertake; many of them require practice which he must do alone. His best efforts are enlisted in the acquisition of the right habit. And for every success some reward is given, a testimonial that converts a universal weakness of human nature into an element of strength. A great contribution to educational procedure — one that reflects severely upon the games and sports of our schools and colleges — is that in scout competition there are no losers. One scout's gain is not another's loss; when one patrol wins, some other one does not go down in defeat. Yet who will say that scouting exhibitions lack "pep" or vim or dogged determination? Scouting does not depend for its success upon side lines and cheer leaders; it finds its reward in the virtue of doing well something worth doing.

The human element. — Then, too, human nature is appealed to in the administrative system of scouting. The device of patrol and troop and community units and national organization puts the boy in touch with other scouts everywhere, gives him responsibility for the conduct of his fellows, and inspires him with pride in the cause. I venture to say that most scouts are in closer touch with their scoutmasters than they are with their school-teachers, and know Mr. West better than they know their superintendent of schools or the state commissioner of education. The personal touch inherent in the system induces a sense of corporate responsibility, makes a virtue of obedience to law, and through imitation, gives concrete expression to a code of honor unparalleled in modern chivalry. Its most striking feature is that it stresses duties instead of magnifying rights. The twelve commandments of scouting are stated in positive terms, rather than in the form of the Mosaic decalogue: "Thou shalt not." The scout *is* trustworthy, loyal, helpful, brave, clean, and reverent. Each of these laws, extraordinarily abstract in the simplicity of its formulation, is illustrated in the daily round of every boy's life. The scout's duty to do a good turn daily — a device worthy to rank with the sewing machine, the steam engine, and the telegraph, and of infinitely greater worth than any such mechanical contrivance for the development of character and the making of citizens — puts the boy not only in a position to understand the moral laws under which he lives, but to incorporate them into the fabric of his life.

Regenerating the American boy. — The scout program, therefore, is essentially moral training for the sake of

efficient democratic citizenship. It gives definite embodiment to the ideals of the school, and supplements the efforts of home and church. It works adroitly, by a thousand specific habits, to anchor a boy to modes of right living as securely as if held by chains of steel; but best of all, it exhibits positive genius in devising situations that test a boy's self-reliance and give full scope to his talent and originality and leadership. These two aspects of the scout program are so evenly balanced and so nicely adjusted as to make them well-nigh pedagogically perfect. The entire organization is a machine capable of working wonders, not only in the moral regeneration of the American boy, but also in fitting him to assume the duties of an American citizen.

Scout leadership. — The more delicate and intricate the machine, the greater the need of skilled operators. On you, therefore, who assume leadership in the Boy Scout movement rests a heavy responsibility. If you are true to the motto of scouting, you, too, must "be prepared." You must know that your business is not primarily to make cooks or campers or hikers or students of nature, nor even efficient workers in any vocation. All these are means to ends, not ends in themselves. The real purpose of your office is to help boys to translate the Golden Rule into concrete terms and to keep themselves physically strong, mentally awake, and morally straight. I have tried to show you that the method you must follow is the simple one of fixing habits and creating situations that invite leadership. The danger is that the very simplicity of procedure may betray you into mistaking means for ends. It is the mistake that so many fraternal organizations for

adults make; it is the error into which so many teachers fall. Be prepared to measure every task by its results in character building. Weigh the relative value of the habits that you can inculcate. Fix the best ones by insistent practice, keep them alive by repetition, and make each one a step to a higher level. Then strive to locate responsibility; put on a boy' shoulders all the load that he can carry; increase it as he gathers strength; let him feel the joy of mastery; and reward him according to his service.

The program for the future. — If your vision is faulty, the ditch that yawns for blind leaders of the blind is not far ahead of you. On the other hand, if you see things straight and see them whole, you have every inducement to demonstrate your ability to lead. Opportunities to show initiative, self-direction, and self-control are not confined to the boys of your troops. Splendid as your program is, it is not beyond the reach of improvement. Genius gave it life, and only genius can keep it alive. If ever this program, which I have praised so highly, becomes formal; if your work as scoutmasters and scout leaders drops into routine; if your system of administration gets so enamored of its success that it becomes autocratic, you will all be on the highroad to oblivion. The best of athletics may grow stale, and the strongest team may fail from overconfidence. It is relatively easy to build up a business, but it is extraordinarily difficult to keep it at its maximum efficiency. The maximum efficiency of this great movement depends finally upon the worth of your contributions to it. The call still is for men of vision, men with initiative, men of nerve and daring, men who, by every test, are fit to be called "good scouts."

CHAPTER XII

EDUCATION FOR DEMOCRACY[1]

THE teaching profession, it seems to me, is singularly indifferent to the signs of the times. Either we are content to attend to business as usual because we don't know what else to do, or we fail to realize the significance of the revolution which is upon us. It would seem that of all vocations, ours should be the quickest to respond to the call to democracy, and the first to propose ways and means of making democracy safe for the world. Inasmuch as a confession of not knowing what to do belies our claims to professional leadership, and failure to understand the meaning of events implies an awful ignorance of precisely that history which we are supposed to teach, I am obliged, out of polite consideration for my coworkers, to seek elsewhere for the causes of our somnolence.

Our faith in democracy. — The truth is, as I see it, we teachers are much like other folks; we have not taken our democracy very seriously. We have all wanted to do as we pleased, and to be let alone in working out our own individual salvation. For this private advantage, we have been willing to entrust our civil government to the tender mercies of petty politicians and party bosses; we have winked at the violation of law, and tolerated slavery, and serfdom, and industrial oppression; we have

[1] A revised reprint from the TEACHERS COLLEGE RECORD, May, 1918.

been indifferent to the ravages of plunder and greed, and to the losses due to administrative inefficiency. All these faults we have been guilty of at times, — and worse, if worse there be — but such faults as these are in reality the concomitants of our virtues. We have sinned in these respects, simply because our faith in mankind is so strong. We are essentially optimists, and we have relied on the best in humanity to overcome the worst. In evidence of our national good intent I have only to point out what has happened when the public conscience has been aroused. Political parties have been punished for their shortcomings, slavery has been abolished, plunderers have been overwhelmed, the thraldom of child labor has been lightened, corporate greed has been checked, and the prohibition of social evils has been enjoined by highest law. It is characteristic of the democratic mind to believe the best of all mankind, to have faith that somehow the good will triumph over the bad. But it is equally true of the individualist that he wants his own way, and that he will wreak his vengeance upon those who persistently betray his confidence. The present world commotion shows that the optimists have been betrayed by those in whom they put their trust. Vengeance is mine, is their watchword. The outcome bids fair to match the bitterness of their disappointment.

The obligation of democracy. — The striving of the world towards democracy is as old as human society. The "inalienable rights of man" are the natural outcome of the instinct to self-expression and self-realization. The doctrine of brotherly love formulated by Jesus and propagated by the Christian Church as a world religion,

has been bedded deep in the consciousness of the modern world. But nowhere has there been a democratic State. The age-long struggle between autocracy and democracy has never resulted in the complete suppression of the one or the complete victory of the other. At best the result has been an aristocracy or oligarchy, with leanings towards autocracy or towards democracy. The ordinary affairs of life go on much the same under any decent government. One must keep off the grass, if the park is worth preserving; keep the fire escape clear, if safety is essential; observe the regulations of the health officer in time of quarantine; pay one's debts, and live up to contracts; help others when they are in need; tell the truth, fear God, and shame the devil. It matters a great deal, however, what is one's attitude toward these obligations and how one comes to recognize them as obligations. If the attitude is one of subservient acquiescence engendered by fear, or even by unquestioning obedience to external authority, the leaning is towards autocracy. If, on the contrary, conduct springs from an understanding of the necessity of such action, or if obligation is accepted after reasonable consideration by those concerned, the emphasis is democratic.

A study in extremes. — Our policy has been to abide by the rule of the majority. We have advocated liberty under the law, and assumed that the law was just. Now the previous question is being put. Is the law just? Who shall say? What is liberty? On the answer to these questions depends all our future happiness, all our hope for ourselves, for our children, and for our country. If justice cannot be assumed by the rule of the majority, who shall decide what is right? Shall a group of intellectuals?

Shall a political party? Shall an industrial corporation? Shall a labor union? Shall any one class in the State enjoy the privilege of setting standards for all others? If not a class or a group or a party, shall each one decide what is right for himself? Our oldest history tells us in its own strong Biblical phrase, that when "every man did that which was right in his own eyes," there was anarchy in the land. It may be providential that we see clearly to-day the logical end of two extremes of government: Germany, the confessed autocrat, surfeited with ambition and drunk with power, trampling on the rights of individuals to gain world dominion for a favored few; Russia, the would-be democrat, impatient of restraint and blind to all sense of civic duty, groveling in anarchy, that each citizen may do as he pleases. If these lessons shall be learned, the war will not have been fought in vain.

Living the Golden Rule. — Whatever may have been the purpose of those who started the war, however selfish the intent of either party at the beginning, it is perfectly clear now that the public conscience of those opposed to the forces of autocracy is stirred to the depths. The whole world is leaning towards democracy. We may not know what democracy means; we may be blind to the evils of a system that easily substitutes license for liberty; we may be selling our birthright for a mess of pottage; but we have reached the decision that a change is inevitable. Indeed, the change has already come. Every day a new order of Government is handed down, regulating transportation by rail and water, fixing prices of necessary commodities, telling us what we shall eat and how we shall clothe ourselves — all to the end, it is said, that we may win

the war. It seems to me, rather, that we are being disciplined by an inexorable schoolmaster to meet the hardships of the future. Just now, like naughty children, we are doubtless scared into being good. Later on, when the fright is past, we shall be disposed to slip back into our old ways. The slogan, "Business as usual," will ring out over all the land. Trade and transportation will make desperate efforts to recoup their losses; store and factory, farm and market, school and college, will gravitate towards their old positions. Let no one, however, make the mistake of thinking that any of these enterprises will ever again be what they were before the war. A government that shows it can take over railroads and commandeer shipping fleets, will never again be helpless in the regulation of transportation; the power that can fix the price of coal and wheat, will have the chance to try it again on a larger scale, when the majority so decrees; if subsidies can be provided to buy farms, build workmen's houses, and supply luncheons for school children, it is only a short step to public largesses for all who are hungry or in need of financial aid. And by these very means democracy may be easily transformed into anarchy. Call it what you will — socialism, Bolshevism, or something worse, — we have passed the era of free competition, where each stood on his rights and was disposed to define his rights to suit himself, into another era, wherein the ideal is justice for all, and for each the right to get what he deserves. The majority may continue to rule, but it must be a majority that exercises the duty of protecting the rights of the minority. While philosophers are striving to define the meaning of democracy and statesmen are giving a

civic form to social justice, schoolmasters will be wrestling with a new set of pedagogical problems. The doctrine that all shall get what they deserve presupposes that the largest possible number shall be taught to want what it is right that they should have. The fundamental problem of a democratic State, as I see it, is an educational one: the problem of teaching the proper appreciation of life-values and of training citizens to act in accord with the precepts of the Golden Rule.

An educational challenge. — It is easy to talk in general terms, as I have been doing. Almost everybody nowadays who talks at all, talks in that way. It is a convenient way of concealing thought. It is high time, however, that someone should make concrete suggestions of the "brass tack" variety. It is even more important that someone should do something worth while. Nowhere is the need greater than in our own field. I would that I could both say the proper word and do the proper thing, but I am neither a philosopher nor a pedagogical expert. The most I can do is to appeal to you graduates of Teachers College to do your bit, and to do it before it is too late. I can put to you the questions which the public will soon be asking, and for which answers speedily will be demanded. The reaction of any one of us may be of little weight, but the voice of 25,000 Teachers-College students can make itself heard.

The first question is, What are the schools for? The stereotyped answer is, The schools are for all the people. Suppose, however, that when the balance of power in our Government goes over to those who, in Mr. Schwab's words, "work with their hands," your new masters say

that the schools are not, and never have been, intended to meet the needs of their children, that they were established to train leaders for Church and State, that their chief function to-day is to equip a favored few for professional work, that they cater to an aristocracy of high-brows and money-getters, that they spend the people's money to make one of a hundred the master of the other ninety-nine, and that, in short, they are not democratic either in aim or method. The ready retort to such a challenge is that American schools, from the lowest to the highest, are open to all, that no one is denied educational advantages by reason of race, creed, or previous condition of servitude, that public education is free, and that the system provides for instruction in any subject and to any extent that the public is willing to support.

Is educational progress restricted? — But in saying that, you are really asking the next question, What should our schools teach? Should they offer instruction in any subject and to any extent that the public is willing to support? Is the converse true, that what the public, or that part of the public that happens to be in control, does not want, or has no use for, should be eliminated? If it be true that class interests in the past have operated to restrict educational advantages to a favored few, will new class interests in the future seek to retaliate by giving special privileges to some other class?

And finally, Who shall control our schools? Shall it continue to be lay boards, chosen by popular vote, or selected to represent some political party or local group? Shall our schools and teachers be at the mercy of those who, happening to have a little power, use it in a little

way? Is the expert in education to be merely the paid agent of a board or a party or a labor union? How otherwise can a democracy attain its ends but by controlling the education of future citizens? If some citizens are set aside for the purpose of teaching, how can you be sure they will teach the democratic faith? Shall we have some day a pedagogical creed to which teachers, like theologues, must subscribe? Will that lead to trials for heresy and the dismissal of nonconformists? Will a democracy find it expedient to substitute for the established church of the old régime a state-supported and state-controlled school system? If that should come to pass, wherein would democracy essentially differ from autocracy?

The stamp of autocracy. — Despite the apparent *reductio ad absurdum*, these questions are not trivial. It were easy to point out sufficient cause for every question listed here. For example, who doubts that our schools denied equal opportunity to all for gaining a livelihood until, within a decade, the demand for vocational training could no longer be resisted? And who would say, even now, that children who want training for work in shop and factory, for store and countinghouse, for farm and home, can get what they need as freely and as universally as those who can afford to go forward to professional service can get theirs? Moreover, it is all too true that many of those who have profited most from professional training, given them at public expense, have miserably failed to return to the public that kind of service which professional honor demands. When the great state of New York undertakes to prescribe military drill, and Ohio to portray the evils of alcoholic indulgence by textbook and prescribed lessons,

we may confidently expect other states to require the study of civics of a particular brand. If German can be eliminated from the schools by act of a board of education, why not Latin or history or mathematics? If Garyized schools can be a party issue in the city of New York, and thrown out by popular vote on the grounds of expense, who knows when the high schools and the College of the City of New York will go the same route? If teachers can be dismissed from service because they cannot conscientiously support some of the actions of our present Government, how can permanence of tenure be assured to disloyalists under some succeeding government? The theory that to the victors belong the spoils has been too long a recognized principle of action to make improbable that it will never again be revived. If democracy undertakes this line of advance, it will need for fulfillment both a State Church and a State School, supplemented by liberal largesses to the proletariat, to keep the citizens in order. The final scene is reached when the travesty of democracy gives way to a military dictatorship.

The program of education. — Perhaps I have said enough to cast some doubt on the sufficiency of old ways and means to meet new conditions. My own belief is that so long as we cling to our old habits of thinking and acting, we shall never solve the problems of our new democracy. The new order demands a new philosophy and a new mode of attack. If the difference between an autocratic State and a democratic State be a matter of emphasis, it follows that the system of education adapted to an autocratic society will differ from the system adapted to a democratic society chiefly in the way it leans. The autocratic State

puts power in the hands of a few, and trains them to use it in the interests of a privileged class; it binds the many down by the discipline of obedience, of reverence, and of poverty. The thirst for power stimulates the greed of money, the search for usable knowledge, and the demand for practical efficiency. The democratic State, on the other hand, emphasizes the rights of man, and imposes on each citizen the duty of being his brother's keeper. The educational program of a democracy, therefore, must stress the universality and the practicability of moral forces.

Forgetting relative worths. — A survey of the recent history of education in the United States raises considerable doubt of our pedagogical contribution to democracy. In our universities, we have made an idol of scientific research; we have weighed and measured and timed everything capable of being accurately tested by quantitative methods; we have used our technical schools to forward every conceivable application of science to art and industry; we have rejoiced in invention, and — too often — have set the dollar mark as the crown of success in discovery. In our lower schools we have concerned ourselves with curricula and courses of study and efficiency in administration. We have systematized and standardized and organized our work so that untrained or half-trained teachers might get measurable results. From grade to grade and from school to school, promotion has depended upon the passing of examinations on what pupils have accumulated for exhibition purposes. Had it not been for the wholesome common sense of our public-school teachers, I doubt not that the German standard of scholarship

and the German standard of efficiency would long ago have dominated our lower schools as they have controlled the policy of our universities.

Now, I have no quarrel with scholarship or scientific research. If a democracy cannot stand the truth, it cannot endure; and if it ceases to add to human knowledge, it will surely stagnate and finally deserve to perish. The trouble with our schools and colleges is that they have been satisfied with knowledge put up, like breakfast foods, in small packages with attractive labels but indigestible contents. The main thing has been to get knowledge because, in the words laboriously copied when we were learning to write, "Knowledge is Power," but in our getting we have sometimes forgotten the injunction of the wise man to get understanding. We have been so keen to get the exact letter of the truth, so exact that the degree of variability can be measured and recorded in decimals of many points, that we have often missed the spirit that giveth life. Exactness is no crime, however, and measurement is not a sin. In fact, Americans might safely accustom themselves to greater exactness and apply more certain measurement to their work. The fault is, not that we have been too accurate, but that we have given too little attention to the relative worth and moral significance of the facts at our command.

The quest for moral standards. — The ideals of the democracy towards which we are leaning are essentially moral, rather than intellectual or material. The intellectual and the material we have with us, and we are not likely to quit our hold on either. What I fear is that we shall not quickly seize upon the moral issues now presented

to us and incorporate them into our educational system. There is an autocratic way of doing things and there is a democratic way. The autocratic method stresses constituted authority, hands down rules and regulations, asks not the reasons why, assumes to know *a priori* what is best and right, and brooks no interference from those who may prefer not to be benefited in such predetermined fashion. The democratic method depends for its success upon coöperative effort and the acceptance of standards that are reasonably convincing. The one tends to drive; the other to lead. The subject of a monarchical State is not asked to understand, he need only obey. The free citizen who understands but does not obey is a menace to the State; he must know the right, accept it, and then unhesitatingly do his duty. In a final analysis, the safety of the State, the maintenance of civil order and social stability, depends primarily upon the discipline that makes right conduct habitual.

Americans are obsessed with a knowledge of the rights of man. We take it in our mother's milk; it seems to pervade the very air we breathe. But we are slow to learn that for every right there is a corresponding duty, for every privilege, a corresponding responsibility. A right once learned is immediately in working order, but a duty recognized may result in nothing more than a twinge of conscience. A duty does not become a potent force until it is fixed in habit. Once grant that schools are responsible for the character of their students, that they must teach the moral law, and see that its precepts function in the lives of citizens, we are transported into a new pedagogical realm. The most important part of our business,

then, becomes a matter of method. Discipline of a special kind takes a commanding place. How shall right habits be inculcated, and how shall selfish traits be eliminated? Answer this question, and you are on the highroad to success in the new pedagogical era.

Freedom of choice. — Someone may say, however, that right habits and good character are matters of opinion, that what suits one may not suit another, and that it will be just as difficult to satisfy our prospective masters on these points as on any other. My reply is that the freedom of a democracy consists not in doing what you please as an individual, nor in doing what you please as a class or party, but rather in the privilege of choosing your own authority and following your own leaders. It is the essence of government to rule, and the authority of a government must be respected. No one of us can escape the necessity of obedience to custom and law. We must yield or be outcasts of society. Under an autocracy we obey without question; under a democracy, we question and then obey. In either case, obedience is a virtue and disobedience is a sin or crime. The strongest motive to conformity in the one case is confidence in the ruling power; the dominant force in the other is the desire to see things straight and see them whole. The valuation of authority, either in the choice of leaders or the acceptance of standards, is a responsibility that may not be shirked by any citizen of a democratic State. It is the *raison d'être* of public education for all the people and to the widest extent.

Servants of the State. — A democracy does not raise the question of transcendental right. It sees nothing

esoteric in the Golden Rule, and knows that no government or nation can long endure that disregards it. If the new democracy be merely a guise for a new kind of class selfishness, it will not last; if it have no higher purpose than to exploit those who disagree, it is bound to lose. I have faith that men capable of reconstructing a world that has been drenched with blood, weighed down with poverty, and overwhelmed with sorrow, will not be found wanting either in sympathy or vision or common sense. Mistakes will doubtless be made, and progress may be slow, but if the new generation be taught aright, success will surely come. The corner stone of the new state will be education — not merely instruction in things worth knowing but also discipline in things worth doing. It will be education for citizenship in a society that is pledged to maintain justice for all and to guarantee to each the attainment of what he deserves. This is work for strong teachers — teachers who can free themselves from hampering traditions, teachers who can rise above party and class and creed, teachers who practice what they preach, and who preach only the truth. Such teachers need fear no act of legislature nor any mandate of a governing board. Bound by professional honor, they will command liberty for themselves by assuring freedom to their fellow men. Servants of the State, they will show their loyalty in patriotic deeds. They call to us to come up higher. It is our reasonable service. We can do no less and be true to the highest ideals of our profession.

CHAPTER XIII

THE ORGANIZATION OF TEACHERS [1]

THE obvious outcome of the World War in education is that schools more than ever before are agencies of the State. The need is for better and more patriotic citizens. More and better education is the only certain means of getting a better citizenship.

Teachers are servants of the State. — The greatest obstacles to the Americanization of our schools are the traditions affecting the employment, remuneration, and qualifications of teachers. The teacher as a civil servant whose foremost duty is the promotion of the welfare of the State is a new conception in American life. Time was when the teacher was a chattel sold in the open market, or a private tutor employed to give instruction in subjects selected by parents, or an adherent of some church whose chief qualification was his ability to safeguard the tenets of his sect. Now teachers are employed by boards of education of a district or city under rules and regulations only slightly limited by state laws. And despite all laws enjoining it, the principle that education is a function of the State is not recognized; practically, the conduct of schools is a local enterprise, controlled by petty officials who are ever biased by local interests and personal whims. The teacher is in reality the employee of the local board, and as an employee, is subjected to all the vagaries of local

[1] An address delivered before the students on the occasion of the Opening Session of Summer School, Teachers College, 1919.

pride and prejudice. To overcome these faults, some of our states have created laws to protect the teacher and define his work, but an individual teacher, no matter how just his cause or how patriotic his intent, has little chance of being heard, if his desires run counter to the whims of the local board. Group action seems to be the only way to progress in a democratic State.

Upsetting tradition. — The tradition that a teacher is an employee of a family or institution or community, to give such service as the employer wants, is responsible for the practice of hiring teachers in the cheapest market. When teachers are paid less than janitors, milkmen, and street cleaners, it is obvious either that sweatshop methods prevail or that the services given are of little worth. Whether a person's service is worth much or little depends upon his vocational skill and his will to work. Back of technical ability lies knowledge. The person who knows what to do and how to do it is an artisan, a trade worker; he who also knows why he does it, and in his doing is guided by high ideals, is a professional worker. By tradition, teaching is a trade; we hope to make it a profession — not merely for the well-being and comfort of teachers, but because the country has need of instructors possessing culture, technical knowledge, and professional skill who will patriotically devote themselves to the service of the nation. In the Americanization of our public schools we need professional experts, and it is the duty of those who know the kind of expert service needed, to use all honorable means of securing it.

A policy of employment. — When teachers are regarded as employees, it inevitably follows that their services are

measured in terms of private interest rather than public good. Tenure of office, remuneration, and vocational advancement are all conditioned upon satisfying their employers. Resistance to official demands, however unreasonable, and advocacy of reforms, however desirable, are alike dangerous experiments, when the take-it-or-leave-it policy of employment is in force. Under such circumstances, coöperation for any purpose except mutual protection is hardly to be thought of. So it happens that the individual teacher is left to himself to ply "the sorriest of trades."

A premium on specialization. — Once grant, however, that the Americanization of our public schools calls for expert leadership, and that the methods used and the ends sought are not subject to private control or local bias, and you put teachers on a different status. Not only is a premium put on culture, technical knowledge, and professional skill, but it becomes a patriotic duty to realize the highest professional ideals in the training of American citizens. The individual teacher will find inspiration and renewed courage in the consciousness of marching shoulder to shoulder with his fellows in the mighty army recruited to fight the battles of civilization and modern democracy.

Fostering consciousness of kind. — The time is past, it seems to me, when teachers should be dissuaded from group organization. The war has made some kind of organization inevitable in that it has given to teaching a new objective and to teachers a new consciousness of kind. The new patriotism, founded in justice and devoted to freedom, must be imprinted on the coming generations.

It is this sense of overwhelming responsibility that is forcing our ablest leaders to devise ways and means of unifying the latent strength of the half-million of teachers in the country. In this effort, they are but following at a respectful distance the example of our oldest professions, law and medicine, which long ago set up professional standards and adopted codes of professional ethics. They also have before them the example of trade-unions, and some teachers, smarting under the injustice of insufficient wage, have not hesitated to grasp the hand of labor. The time has come when teachers must decide whether they will lead in their own way, or be led in some other way, whether they will set up standards worthy of a profession, or continue to be employees in a trade.

Professional standards. — An organization of teachers, nation-wide and properly authoritative, must be founded on principles that will be universally recognized as valid, and its conduct must be above reproach. No selfish motive can be allowed to interfere with the realization of its ideals. If the present world crisis makes such an organization possible, it also imposes acceptance of professional standards.

A code of professional ethics, therefore, is the first and most important desideratum — a code reaching to the individual teacher and defining the purpose of the organization. The organization itself exists merely to consolidate the strength of its individual members and to apply it at strategic points. The problems of tactics and strategy, however, must be in the hands of competent leaders who themselves shall be guided by professional ideals.

I do not flatter myself that I have any special quali-

fications for writing a code of ethics for teachers. A code that will command the confidence of the public and at the same time protect the rights and define the responsibility of the teacher, will be the work of many persons. Constitutions that last are works of genius, but most of them grow from very humble beginnings.

An ethical code for teachers.— This, then, is my contribution:

1. Every teacher in the organization must be one hundred per cent American.

Training for citizenship is more than giving instruction in school subjects. Patriotism, loyalty, and courage are as contagious as measles. Right example is the surest way to inculcate appreciations and attitudes and to demonstrate the value of fair play, teamwork, and self-control.

2. The work of the teacher must be professional in character and honestly performed.

Malpractice in teaching is more serious than malpractice in medicine; the fact that proof of incompetence in the teacher is buried in the retarded lives of children is no release from moral responsibility. The organization must concern itself with the qualifications of teachers — their training, certification, and classroom ability. A corollary is that good service should be rewarded and the honest teacher protected.

3. The teacher, as a faithful servant, is worthy of his hire.

No true teacher ever has worked, or ever will work, solely for money. The necessity of standardizing salaries in a great school system will always militate against the

recognition of individual merit, but this is no excuse for rating all at the value of the poorest. A living wage is one that counts the cost of preparation and the value of the output, as well as the expenditure of time and energy in the day's work. There should be no discrimination against sex, grade, or school — equal pay for equal work by those giving equal service. The same devotion to the kindergarten or the rural school or the high school given by teachers of equal attainments, whether men or women, theoretically merits the same professional standing and the same remuneration. Practically, however, classification is imperative in a school system as a basis for the assignment of duties and adjustment of salaries, but it should not operate to check personal ambition or restrict professional advancement. One object of organization is to protect the weak from exploitation and to help them to a higher professional and economic status. Another object of no less importance, is to minimize the practical difficulties incident to the operation among teachers of the law of supply and demand, and to the varying standards of fitness as set for different grades. No democratic nation can endure that does not have good teachers. And no teacher can give his best who does not enjoy a living wage.

4. The organization must be honest and straightforward in its dealings with the public.

Collective bargaining is a two-edged sword. It must be used by the organization in securing proper buildings and equipment, higher professional standards for teachers, better teaching in the schools, and adequate salaries for those who do the work. It means appeals to public opinion,

bargaining with school boards, and arguments to legislators, but it should not mean threats, intimidation, and strikes. A contract is inviolable. The teacher who is not forced to accept appointment and who cannot be locked out of his schoolroom has no excuse to strike. When every expedient is exhausted and a school or system is still unwilling to put its work on a professional basis, the last resort that is honorable is for teachers to refuse appointment and to brand that school or system as unpatriotic. It follows that no teacher with any professional pride will fill a place left vacant under such circumstances.

5. The organization should coöperate with every other group of citizens for the promotion of the public good, but should avoid entangling alliances with anyone.

Entangling alliances. — The teacher occupies a peculiar position in the body politic. He instructs children in the rights and duties of citizens. His wards of to-day are the voters of to-morrow. Some of them will be found in every group, party, sect, and organization that exists in the community. He should teach them the fundamental principles of American life and help them to make wise choices in their affiliations, but he may not proselytize or conduct propaganda for any cause on which citizens are divided. A decent respect for the opinions of others must characterize all that he does. The organization, therefore, which acts as the super-teacher cannot favor either Jew or Gentile, republican or democrat, capitalist or laborer. It honors them all for the good they strive to do, and will join with them in all good works, but it cannot be subservient to anyone. I realize that the American Federation of Labor is potentially one of the

most beneficent organizations in the United States, and I have the highest regard both for its leaders and for their objects, but it would be a mistake both for the Federation of Labor and for the prospective organization of teachers, to form an offensive and defensive alliance. It might be the easiest way to secure an increase of teachers' salaries, but more pay is not the only object of a teachers' organization, and not the one that will insure its greatest usefulness either to the profession or to the public.

It would be just as fatal to become entangled with the Manufacturers' Association, the Bar Association, the Christian Association, or the Democratic Party. If this latter suggestion is ludicrous, so also is the example set by some groups of teachers who have already identified themselves with the labor organizations. "Friends with all, but allies of none," must be the slogan of a teachers' organization.

The attainment of professional aims. — These five points seem to me worthy of consideration by those who would write a code of ethics for teachers and a constitution for a teachers' organization. My chief concern is to free teachers from local oppression, to change their status from employees of a school board to servants of the State, to demand of them professional fitness, and to expect of them professional service, and to evaluate their worth by their contribution to American citizenship. Once these ends are attained, I am certain the public will gladly pay the price. Center the united strength of half a million of teachers on these points, and the teachers' millennium will soon be ushered in.

CHAPTER XIV

THE UNIVERSITY AND PROFESSIONAL TRAINING [1]

THE problem of professional training is to-day the most important problem in the administration of American universities. Reckoned in terms of cost, or of equipment necessary, or of students and teachers engaged, there is no other feature of university work so prominent. Indeed, if student population continues to increase at anything like the ratio of increase experienced in the last decade, the time is surely coming when some of our universities — particularly state universities — will be exclusively devoted to professional training and to the prosecution of research — itself a highly specialized form of professional training. The academic instruction now given in the freshman and sophomore years will be relegated to junior colleges, as is now being done in California, where the State University is overcrowded. Even a short look ahead justifies special consideration of the nature and extent of professional training in the future development of the university.

Shortening the period of apprenticeship. — What is professional training? Let me say at the outset that I do not regard it as anything esoteric. It is merely a device to shorten the period of apprenticeship undertaken by every learner who would acquire the knowledge and skill possessed by the leaders in his field. It is a means of

[1] An address delivered at the inauguration of Lotus D. Coffman as president of the University of Minnesota, 1921.

carrying the novice over the road already trod by his masters, and of saving him from some of the dangers that lurk in his way. Its highest aim is attained when, in addition to the modicum of knowledge and technical skill required for admission to the profession, the young practitioner goes forth with unselfish ideals of service and a mental equipment that impels him to develop his own professional strength.

Knowledge, skill and ideals. — The aim of the professional school is to fit its graduates to give expert service in a society that feels its need of technical skill and is willing to pay for it. The world buys products of human labor, but what it really pays for is the technical skill of the worker. And back of technical skill lie specialized knowledge and the fine art of using it properly. Indeed, the only difference between the artisan who repeats a thousand times an hour the same clever trick of manipulation, and the operative skill of the great surgeon, lies in the extent of knowledge focused on their tasks and the ideals that inspire the workers. Both workers may have skill of the highest order, but in the one, the center of control is the spinal cord; in the other, a higher center takes charge. Specialized knowledge, high ideals, technical skill — these three are the trinity of professional guidance.

Proportioning professional aims. — It follows, therefore, that a professional school should set up three dominant ends to aim at. In its curriculum it should strive to organize and systematize the knowledge available in its particular field so that its students may get the essential facts needed at the beginning of their career; in its teaching

it should give inspiration to creative effort and altruistic service; and at some stage of its training provision must be made for gaining technical skill. The pedagogical problems of all professional schools grow out of these three fundamental requisites. These factors, however, are all variable quantities. A professional school may be acceptable in general and yet be weak in one or more of these essentials. The ideals that guide the faculty may be rightly conceived, and yet fail to function in the lives of students and graduates. The knowledge gained in course may be defective because of lack of scholarship on the part of instructors, want of intelligence in students, or through bad teaching. Technical skill may be purchased at too great a cost, or neglected to the point of leaving graduates helpless on entering their vocational employment. Right proportion in the adjustment of these essentials is the crux of administration in every type of professional school.

The curriculum of the professional school. — Consider first the problem of the curriculum. The professional student is not concerned with science in general, or philosophy in general, or anything else in general. His needs are very specific. He is given absurdly short time to get the information that scholars and masters of his subject have been collecting for centuries. His task is to select what is usable, to rearrange and classify it, to order it in such a way that principles shall emerge which may guide him to new knowledge or direct his practice. The whole process of education hitherto experienced is now reversed. Instead of getting a liberal education that aims to develop the *man* through culture and discipline of academic studies, the professional student finds himself in a situation that

demands he focus all his strength on making himself an intelligent, conscientious, efficient technical *worker*. There is no room for academic instruction in a professional curriculum once professional training really begins. The mental attitude of the student precludes the possibility of success, and the needs of the profession make it impracticable. No professional curriculum gives half as much as is available in any professional field, nor half as much as the practitioner in any particular field can profitably use. Unless the liberal education acquired before professional training begins is dynamic and continues to function in making the man, there is small chance of further development under professional training. On the other hand, an education that does not result in making a man good for something is an anomaly in this workaday world. Vocational training is the complement of academic training. It can never be a substitute for a liberal education, and it should never be confused either in aim, content, or method with academic training.

Conflicts in organization. — A part of our trouble comes from the organization of our university system and arises from the fact that students are admitted to professional schools poorly prepared for professional training. The lack of academic training in some essential subjects excuses the introduction into the professional curriculum of subjects that properly belong to the college. The consequence is that most of our professional curricula are partly academic. On the other hand, no American college that I know confines its students to instruction that has no bearing on their future vocation. More and more the American college caters in its later years to the

professional interest of its students. This overlapping of the college and the professional school is peculiarly American; it is the natural outcome of our individualistic system of higher education.

From the standpoint of the professional school, the interlacing of academic and vocational courses has two serious consequences. First, it tends to shorten the period set apart for professional training, and in the second place it intrudes into the professional school academic standards and methods of instruction wholly foreign to the professional spirit.

Limits set by time. — The time that can be devoted to professional training is determined by hard economic facts. Theorizing on what the profession demands or what society should have by way of expert service plays a minor part. Society gets in the long run what it is willing to pay for. Professional workers, like other capitalists, are not inclined to increase their stock in trade beyond the point of satisfactory economic return. Fortunately, however, the professional worker is an idealist who counts as part of his reward the joy he finds in his work. But by and large, expert service is balanced by a cash equivalent, the size of which predetermines the expertness of the service as measured by the time expended in getting it. Lengthening a professional course is not necessarily synonymous with raising standards. Passing the limit of satisfactory economic return inevitably tends to decrease the number of applicants or to lower the professional ability of those content to plod through a longer course. The curriculum may be lengthened upwards, therefore, only if the graduates can increase their income

enough to warrant the increase of capital represented in their training. So long as only a few can profit from a lengthened curriculum, the device of a graduate professional course, as distinguished from research work, is the obvious way of meeting the situation.

Crowding the curriculum. — The output of productive scholarship, increasing as it is every year in all professional fields, puts a heavy strain on professional teaching. Alert teachers find something new to add to their instruction every year. Some teachers in every faculty lack the ability to substitute the new for the old, and go on teaching this year what they taught last year. They invariably excuse themselves by an appeal to mental discipline, as though mental discipline could best be secured by presenting half truths or irrelevant facts. Others add to an overcrowded course more and more material until their students succumb to mental dyspepsia. But, with the best of foresight, the inevitable tendency is toward an overcrowded curriculum, and its accompanying discomforts for both teachers and students.

Economy of time for the student and efficiency of teaching for the instructor are vital problems before every faculty. I suppose the only method of determining correct procedure is by trial and error. The trouble with most college faculties is that they make the trial without profiting from their errors. They don't bury their mistakes, as physicians do, but they do graduate them.

Paving the way to specialization. — The introductory courses in most of our professional schools are the chief obstacles to lengthening the curriculum by extending it downwards. If they are really pre-professional, are they

the best and most expeditious means of getting students ready for serious work in the several fields in which they specialize? The stock answer that these courses are well taught, that they are comprehensive, and that they afford excellent mental discipline, is beside the mark. Grant all that. The same can be said for scores of other courses — some of which would be of incomparably greater worth to the farmer or the engineer or the physician who may be asked to represent his constituents on the County Board or in the Legislature, or who in his leisure hours wishes to read his daily paper intelligently and find pleasure in human affairs.

The fact is, I assume, that these so-called introductory courses are included in the curriculum, first, because they are preparatory to the later work, and, second, because by university tradition (but more because of university poverty) they are regarded as fundamental. I am willing to grant that early in the course, preparation should be made for what is to follow; but every hour, from the time the student enters, is a preparation for all that comes after. Any line that may be drawn between general and special courses, or between pure and applied sciences, is purely artificial and arbitrary. The whims of academic teachers too often determine what introductory courses shall be given and how they shall be taught. Professional needs make way before the omniscience of academic specialists.

Consulting the specialist. — The opinion of specialists on matters outside their own field, however, is of no more consequence than the opinion of other good people. Indeed, it may be not quite so good, if their personal interests are

involved. Nevertheless, interdepartmental courtesy is so prevalent in every college faculty with which I have been connected, that it becomes dangerous to question the judgment of a strong man entrenched behind the entanglements of his own specialty. The fact is, however, that there is no one course universally recognized in American colleges as the best introductory course in any department. And even if the topics treated appeared on paper to be the same, the personality of teachers and their selection of illustrations would differentiate their instruction. The choice of topics for such courses has been conditioned by the interests of teachers and the needs of students. The needs of investigators in the several fields have undoubtedly had first consideration, and next have come the needs of students in the older professional schools. A new school, such as the school of agriculture or journalism or business, has a hard row to hoe and receives tardy acknowledgment of its rights.

A matter of false economy. — Probably the strongest prop for the idiosyncrasies of collegiate heads of departments is the disposition of those who hold the purse strings to take the cheapest way. It undoubtedly costs less to give the same introductory courses for all students, at least during the formative period of university history; but there comes a time when the student enrollment in a particular school is large enough to justify special consideration. For example, it would not appreciably increase the cost of instruction in most of the science departments of a large university to give special introductory courses to students in the school of agriculture or engineering or medicine. If that were done intelligently, the

selection of topics could be restricted to principles needed by the particular group of students, and all of the illustrations might have a direct bearing on the professional course. And the proper persons to decide what principles are needed and what illustrations are most serviceable, are those who have the professional understanding. The result would surely be a better preparation for professional work and a saving of students' time. Otherwise, I see no escape from an overcrowded curriculum, with the inevitable consequence of narrow specialization and bad teaching.

Meeting professional needs. — It may be too much to expect that the American professional school should so early burst the swaddling bands of its academic nurse. Our oldest university professional schools had their beginning scarcely more than fifty years ago, and thirty years ago the best medical school and the best law school in the city of New York were really proprietary institutions. The foundations of agriculture and engineering were laid under the stress of our civil war, but the superstructure as we know it has been built in the last thirty years. These schools are all offshoots of the college, and the college supplied most of their early teachers. What wonder, then, that academic ideals of scholarship and academic methods of teaching found their way into the professional schools. The framework and nomenclature of the college still remain. We have departments and subjects of study and semesters and credits — all according to the strict letter of the academic law. And yet we know that a department in the academic sense exists for the development — not to say illimitable expansion — of a

subject, even to the bankruptcy of the institutional purse. A professional school has no need of departments except for administrative convenience. It has no excuse for courses of set length or for credits measured in semester hours. It needs only a faculty, because a faculty as distinguished from a department in our university system exists to protect and further the interests of a particular group of students. Professional students demand that their instruction concern itself with the real work of life. Such a demand is perfectly legitimate, and no professional school can afford to ignore it. In fact, so far as I know, there is no other end worth working for in a professional school. We must rid ourselves of the notion that because an act or a process is simple or common, therefore it is unworthy of a place in a university school. The material of instruction in a professional school cannot be measured by academic standards. The needs of the practitioner in his practice are the sole standards for determining what he should be taught. The binding of a wound or the tying of an artery is not a superlative test of intelligence, but no medical school thinks of graduating a physician without giving that ability. The professional school must teach what the student needs and has not already learned.

Padding the curriculum. — A corollary to this proposition is that what the professional student needs should be taught in the most efficient way and in the shortest possible time. A professional school has no excuse for following academic tradition in giving courses all of the same length and mostly of the same credit. Graduates complain of padding in some courses given by academically minded

teachers. How can it be otherwise, if an instructor must spread over a semester, three hours a week, what might be better done in one third or one fourth that time? I know the disposition of college faculties to look askance at courses that can be given in less than semester units. Some are sure to say that they are not of university grade. My reply is that such critics are not of professional grade; they are either academic or research teachers. And no professional school should be controlled either by an academic or a research faculty. The professional school that hesitates to teach what is needed by the practitioner in his practice, or to teach it adequately and in the shortest way, is headed toward the tail end of the procession.

Improvement in university teaching. — It takes more nerve than I have to discuss the practical problems of methods of teaching in a university. One may have his suspicions of the procedure behind the closed doors of a college classroom, but only the students subjected to the ordeal are really in a position to judge. But students are not competent to pass judgment on a teacher's work except in an empirical way, by comparison with the work of other teachers. The most serious obstacle to good workmanship in the teaching profession is the fact that the teacher rarely has a chance to measure himself with his equals. He deals only with his inferiors in point of intelligence, experience, and skill. What wonder, then, that some teachers fall into ruts, become intolerant of innovations, and resentful of criticism either from their students or colleagues?

There is, however, one general principle of teaching that should commend itself to every instructor in a pro-

fessional school. Granted that no professional student can possibly get in the time allowed for a professional course all that he needs in his future career, it follows that the materials of instruction should be those of most practical service, and should be presented in such a way as to beget the clearest understanding of their use. Useful knowledge comes from facts carefully coördinated — done up in packages and labeled "principles." There is no one best method of doing anything in general, but there may be a best method for a particular worker under very particular conditions, to do a particular thing. The teacher who is alive to his responsibility, conscious of his faults and ambitious to improve, will find a better way of doing his work with each succeeding class. The pity is that he should be willing to travel the path alone, giving pain to himself and doing injury to others, when so many of his predecessors and colleagues are competent to act as guides.

Craftsmanship for the practitioner. — Intelligent workmanship is the final test of professional ability. High ideals and abounding knowledge will not save the practitioner from merited condemnation, if he fails in technical skill. Malpractice in medicine is not essentially different from incompetence in farm management. Such competence as is necessary to start the professional worker in the right way must come from practice under a master. Technical skill is established in habit. Bad habits are as easily acquired as good habits — and far harder to break. The steps in habit formation are three: (1) the learner should know *what* he is expected to do; (2) he should be shown *how* to do it; and (3) he must be kept doing the

right thing until it becomes automatic. The conscious effort of an intelligent learner aids powerfully in determining the proper procedure in a particular case, but only persistent practice can ever give the skill demanded of the successful practitioner.

Improvement of technical skill. — Some professional schools, like law, medicine, and engineering, have a well-defined body of special knowledge which can be imparted to relatively young students. The business of such a school is to uphold its professional ideals and give competent instruction in professional subjects, leaving the acquisition of technical skill to come during a period of apprenticeship in an office, a hospital, or a shop, under the eye of a master. In the case of other professional schools, like those of teaching, journalism, and agriculture, the graduate must make good the first day on the job, at least have the ability to conceal his faults. Under such conditions, technical skill is at a premium. It is true, however, in every profession that technical skill is an asset which must be acquired, if not in course, then in the lower grades of professional service. How much should be given in the professional school is always determined by the conditions prevailing in the profession. The profession that expects its novice to stand on his feet when he graduates must teach him to walk while in school. It does not follow, however, that a college graduate needs the same automatic precision in technical skill that the trade worker finds necessary. The lower the intelligence of the worker, the greater need of training in habit; the higher the intelligence, the more can be left to self-direction. But every graduate of a professional school should have

practice enough in doing the real work of his future vocation to make him conscious of his faults and to give him confidence in his ability to direct himself in the application of his knowledge. It is not a question of the necessity of practical work; that must be conceded. The real question is, how and when can it best be given? Given in one way, the college is reduced to the rank of a trade school; given in another way, it places the institution on the professional plane.

The basis for continued growth. — Professional training as I have said, is merely a device to shorten the period of apprenticeship undertaken by every learner who would acquire the knowledge and skill possessed by the leaders in his field. The professional school teaches only a part of the game; it succeeds best when it induces its students to become learners during the rest of their lives. When it provides the minimum required of its graduates on entering their vocations, the rest of their instruction may safely deal with the reasons underlying their professional practice. These reasons are embodied in the specialized knowledge that I have characterized as an essential factor in professional training.

A golden mean. — It is obvious that the reasons for a particular treatment can best be illustrated by reference to the act itself. It is the principle underlying all laboratory work, except when laboratory work is made an end in itself. The student who sees what happens to a soggy field is better able to appreciate the reasons for underdrainage. A month in charge of a dairy herd will vitalize the teaching of the principles of feeding as nothing in books or lectures can do. The case system has revolu-

tionized the study of law, and the appeal from the lecture and the textbook in medicine to the laboratory, the bedside, and the clinic has transformed the professional training of the physician. Hence, I maintain that success in teaching the principles of professional practice is conditioned by actual experience in the practice of the profession. Here, then, is where the professional school kills two birds with one stone. The ideal balance is obtained when enough practice is given to check up the theory, and enough theory to direct the practice aright. Disturb this balance by teaching theory as an end in itself, and you have an academic institution. Teach theory as reasons for practice, and you have the makings of a professional school. More cannot be expected until teaching itself becomes a profession and its novices are subjected to the same rigorous training that the best professions now expect of their candidates. Meantime, there is only one unpardonable sin that a professional faculty is likely to commit, and that is the failure to uphold its own professional standards without fear or favor of academic tradition.

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